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SMALL BUSINESS ADMINISTRATION  
IMPACTS ON THE  
CONSTRUCTION INDUSTRY

A Special Research Problem

Presented to

The Faculty of the School of Civil Engineering  
Georgia Institute of Technology

by

Alan Michael Wironen

11 \* \* 1

In Partial Fulfillment  
of the Requirements for the Degree of  
Master of Science in Civil Engineering



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### Dedication

To Kimberly and Robyn, for their  
understanding and patience.



## Table of Contents

### CHAPTER 1

INTRODUCTION, OBJECTIVES (5)	
Introduction . . . . .	5
Objectives . . . . .	7
Background . . . . .	8

### CHAPTER 2

HISTORY (10)	
In the beginning . . . . .	10
WWI and The Great Depression . . . . .	10
Post WWII . . . . .	13
The SBA . . . . .	15
The 1960's to the Present . . . . .	18

### CHAPTER 3

THE SMALL BUSINESS ACT	
AND RELATED LEGISLATION (20)	
The Small Business Act . . . . .	20
SBA Organization . . . . .	22
Relationship with other Agencies . . . . .	24
Small Business Defined . . . . .	27

### CHAPTER 4

SMALL BUSINESS SET-ASIDE PROGRAM (30)	
What is a Small Business Set-Aside . . . . .	30
Set-Aside Defined . . . . .	31
Goals . . . . .	33
Set-Aside Criteria . . . . .	37
Qualification for Set-Aside Contracts . . . . .	41
Award Priority . . . . .	42
Chapter Summary . . . . .	43

### CHAPTER 5

THE 8(a) PROGRAM (45)	
Overview . . . . .	45
The 8(a) Program . . . . .	47
8(a) Contract Identification . . . . .	49
Contractor Qualification . . . . .	50
Contractor Selection . . . . .	54
Contract Award . . . . .	55

### CHAPTER 6

CONSTRUCTION RELATED LOANS AND BONDING (59)	
The SBA Guarantee Loan and Direct Loan . . .	59
Comparison of SBA Guaranteed and Direct Loans . . . . .	60
Application and Qualification . . . . .	60
Loan Terms . . . . .	63
Uses of SBA Loans . . . . .	65
The SBA Small General Contractor Loan . . .	66



CHAPTER 6 Continued

SBA Bonding . . . . .	68
Bond Qualifications . . . . .	69
Conditions and Cost . . . . .	72

CHAPTER 7

## SPECIAL LOAN AND BUSINESS ASSISTANCE PROGRAMS (74)

Discussion . . . . .	74
Loan Programs . . . . .	76
Business Development and Management Programs . . . . .	80
SCORE . . . . .	81
Small Business Development Centers . . . . .	82
Small Business Institutes . . . . .	83

CHAPTER 8

## SBA EVALUATION SYSTEM (85)

Goals and Evaluation . . . . .	85
Scarcity of Data . . . . .	85
Available Data . . . . .	87
SBA Reporting System . . . . .	88
Limitations of SBA Data . . . . .	89
Detailed SBA evaluation . . . . .	92
Summary . . . . .	93

CHAPTER 9

## CONSTRUCTION INDUSTRY TRENDS (94)

Discussion . . . . .	94
Growth of the Construction Industry . . . . .	95
Construction Business Starts . . . . .	107
Business Failures . . . . .	111
The Fair Share . . . . .	115

CHAPTER 10

## PROGRAM ANALYSIS (120)

Background . . . . .	120
SBA Program Awareness . . . . .	121
8(a) Program Participation and Cost . . . . .	124
8(a) Contract Bidding and Growth . . . . .	126
Title II Contracts . . . . .	128
Title II Contract Bidding and Growth . . . . .	129

CHAPTER 11

## CONCLUSIONS AND RECOMMENDATIONS (132)

Conclusions . . . . .	132
Recommendations . . . . .	136
Further Research . . . . .	139

BIBLIOGRAPHY

141

APPENDICES

144



## List of Tables

Construction Industry	
Standard Industrial Classification Codes . . . . .	28
Fiscal Year 1987-1989	
Small Business and Small Disadvantaged Business Contracting Goals . . . . . . . . . . . . . . . . .	35
Individually Reported Contract Actions 1979-1985 . . .	118
Construction Procurement Share VS. Industry Share . .	119



## List of Figures

Figure (9.1) Number of Construction Contractors in the United States . . . . .	97
Figure (9.2) Number of Small Construction Contractors in the United States . . . . .	99
Figure (9.3) Small General Contracting Firms as a % of all General Contractors . . . . .	100
Figure (9.4) Number of Small Specialty Contractors as a % of all Specialty Contractors . . . .	101
Figure (9.5) Number of Small Construction Firms (1972) as a % of all Construction Firms . . . . .	102
Figure (9.6) Employment by Construction Contractors. . . .	103
Figure (9.7) Employment by Small construction Contractors as a % of all Construction Contractors . . . . .	106
Figure (9.8) Employment by Small Construction General Contractors as a % of all General Contractors . . . . .	105
Figure (9.9) Employment by Small Specialty Contractors as a % of all Specialty Contractors . . . . .	106
Figure (9.10) % Employment by Small Construction Contractors as a % of all Construction Contractors . . . . .	109
Figure (9.11) Construction Business Starts . . . . .	110
Figure (9.12) Construction Business Failures . . . . .	112
Figure (9.13) Construction Business Failures by Contractor Type . . . . .	113



CHAPTER 1  
INTRODUCTION, OBJECTIVES

Introduction

The idea of freedom is basic to our form of government and way of life. Our country was founded on this simple idea, our military was formed to protect it and our economy runs on the principal of free enterprise. As free elections are to our governmental system, competition is to our economy. Competition is the key to a free enterprise system. When competition is lost, the innovations, economy and incentives which competition fosters are also lost.

Competition is the key ingredient for our industrial might and the driving force in our economy. Consider for example, a company which produces an essential consumer product. Without competition, that company could indiscriminately raise prices. Any business which attempts to market a similar product would be driven out of business. Note that without competition the business no longer has an incentive to produce improved products, operate the plant efficiently, or invest in new product research. On the other hand, with competition, the business is forced to improve production techniques, utilize state of the art equipment, continuously improve its product and introduce new products



to the consumer; failure to do so would increase his competitors percent of the market. Lack of competition impacts much more than just the one company that remains in business.

In a monopoly, higher priced products would use money that would have gone to other consumer goods. Eventually, businesses not in direct competition with the monopoly would also suffer. Unemployment would be driven up, and production would decline. This is obviously an extreme case, but it serves to illustrate the effect that lack of competition could have on the national economy. The economy of our country would suffer drastically without competition, but the country's very existence would also be threatened. The United States has maintained a technological, advanced society, which enables us to maintain our political system and way of life. This is partly due to the competition among the defense contractors to develop new products. For national security, the government tries to maintain a broad range of competitors. How does this provide national security? It ensures that no one company is the producer of any essential hardware or piece of equipment; which is only guaranteed through free and open competition.



The stated goal of the government is to ensure free and open competition in the United States markets (SBA, 1953). The Small Business Administration (SBA), nevertheless, tries to promote competition through restricting it, or by providing an edge to a particular segment of the industry.

Through coordinated assistance programs, the SBA designates specific items to be purchased only from small businesses. They can also award contracts to specific minority or socially disadvantaged businesses without competition, and provide guarantee loans to businesses. The Congress realizes that the United States economy is made up of a majority of small businesses which employ over 50% of the work force, and produces over 40% of the Gross National Product (GNP) (Kleppe, 1974). It is essential that these businesses survive and are able to compete with larger industry. To ensure competition, the SBA provides the previously mentioned "Set-Aside" programs for small businesses, government guaranteed loans and training programs.

### Objectives

It is the purpose of this paper to explore the unique opportunities available to the small construction business owner, or prospective owner, for gaining a competitive edge over his big business rivals, and how the Small Business



Administrations policies have affected the industry by promoting new construction businesses, making capital available for the expansion of existing businesses, and providing management assistance and training.

A summary of the Small Business Act and its amendments is presented to provide some background on the authority of the Small Business Administration, its organization and objectives. A discussion of how effectively the SBA is meeting its objectives will be presented along with recommended areas of further study.

### Background

Unlike many areas in the business and construction fields, the particular effects the SBA policies have had on the construction industry have not been studied. The SBA does keep records on loans approved, contracts awarded etc, yet no set procedure has been established to record the effects that the Administration's policies have on a particular industry's failures, costs or the true effectiveness of SBA programs.

Additionally, very little information has been published on construction business starts and failures. Some limited statistics on the construction industry have been compiled by



the Small Business Administration and Dun and Bradstreet Corporation, but the statistics do not address specific policy impacts.. Dun and Bradstreet is a private corporation which maintains a database of business information, including business starts, failures and incorporation. Except for the limited information provided by Dun and Bradstreet and that obtained from the Small Business Administration database, all other information was compiled from interviews, miscellaneous publications, local banks, insurance companies, and business surveys.



## CHAPTER 2

### HISTORY

#### In the beginning

At the turn of the century, the American people stood at the threshold of industrial opportunity. The industrial revolution was just reaching its top speed. As the nation stepped into the new century, new ideas in industry, technology and science were carried along.

In the few years after the turn of the century, a flood of new inventions flowed out from the small laboratories and shops across the country. Aided by a new industrial concept ... mass production, the new inventions and older essentials could be produced quicker and at less cost. Fueled by inexpensive, immigrant labor, and with an abundance of raw materials, the industrial might of this country grew at a pace never imagined.

#### WWI and The Great Depression

During the rebuilding period following World War I, the business growth in this country momentarily bogged down. It wasn't until the great depression struck, on October 29, 1929, that the country suffered its first serious business



crisis. In three years over 10,000 businesses failed, with a corresponding loss of over \$450,000,000 (Dun and Bradstreet, 1962).

In the years following the stock market crash, the business growth rate had not only lost momentum, it had reversed itself. During the early days of the depression financial institutions were being bankrupt along with many of the worlds industrial giants. The financial institutions could no longer meet industry's monetary needs, and they themselves were in need of assistance. It was imperative that the Federal Government step in to assist, since no other institution could fill their needs.

The Federal Government created the Reconstruction Finance Corporation (RFC), in January 1932. The RFC initially only provided financial assistance to failing lending institutions. Later, the RFC was authorized to provide loans directly, or in participation with private lending institutions, to businesses of any size.

In the period prior to World War II, many significant events took place which helped shape the economic and political development of this country.



The evolution from an agricultural nation to an industrial one required a labor force to build new factories, it also needed laborers to work in the newly constructed factories. As has been mentioned, an influx of immigrants from Europe and Asia provided the needed workers. The United States' industries and the immigrants needed each other. Without laborers in the factories no goods would be produced, alternately, without the factories, the immigrants would have no income. In fact, it was the lure of economic and political opportunity which attracted the immigrants. Although the wages paid by the factories were significantly higher than the prevailing wages in the countries the labor force came from, it was still only slightly adequate to survive on. This situation forced many children, elderly and even the sick to work long hours in poor conditions.

Working conditions were barely tolerable, with poor lighting, temperature, noise, sanitation and ventilation. Workers could not fight for better conditions without the threat of loosing their jobs. The established companies grew stronger, while competitors were forced out of business.

As big business emerged, along with it came the evils of economic concentration, monopoly and oligopoly. The forces causing the businesses to prosper eventually forced the government to take a more active role in the economy. Big



government began to evolve from a laissez-faire, states rights system, to what we have today. The first attempt by the Federal Government to control the forces moving the nations industries, was the Sherman Anti-Trust Act of 1890 (Chase, 1974).

After several failed attempts at unionizing, the labor movement was able to gain some concessions from management. Changes in the political atmosphere allowed Congress to pass effective legislation aimed at regulating business. These include the child labor laws, Clayton Act, minimum wage laws and several others. These laws served to provide more humane working conditions and limited the unfair competition used by the established businesses to force competitors into bankruptcy. They thus opened the United States to the small businessman and entrepreneur.

#### Post WWII

After World War II, historians were able to look back at the events, which during the war, contributed to the allied army's dominance. Shortly after the attack on Pearl Harbor the Japanese must have realized the industrial might of the United States. The Japanese had apparently miscalculated the period of time it would take this country to recover from the devastation of the Pearl Harbor invasion. By the end of 1942,



the United States had achieved production rates which approached the national production capacity (Faulkner, 1968). Our country's ability to convert its industry from that of peace time production, and products, to the frenzied production of war material, was instrumental in our ability to win the war.

During the war, a large portion of the country's industrial might was made up of small businesses. Congress was concerned whether small business would be able to obtain the credit necessary to expand for war time demands. Congress was also worried, whether the economic concentrations caused by the increased demand would be disastrous for small business if government assistance was not provided. With these concerns in mind, Congress passed several pieces of legislation, the most significant of which was the Small Business Act of 1942, which created the Smaller War Plants Corporation (SWPC). The SWPC was to assist small business by making loans, certifying capacities and credit, secure contracts and subcontracts for the businesses, and lease or sell facilities and equipment to small firms. This was the first legislation enacted directly aimed at assisting small businesses, and was intended to be a temporary agency to be terminated at the end of the war.



Many other laws and programs were created during the war and shortly afterward to encourage hiring veterans, creating new businesses, and financing the war effort. One of the programs was the VA loan program; intended to provide loans to veterans for the purpose of starting or expanding a business. Because of the size and restrictive nature of the loans, virtually all of the loans went to small businesses.

### The SBA

By 1952, congress had the opinion that the RFC was now unable to perform its intended function because of influence peddling and political loan making (Senate Committee on Banking and Currency, 1953). The RFC was also making loans to large businesses. By this time the RFC was so wrought with corruption, the Republican party returned to power partly on its promise to dismantle the RFC. President Eisenhower's administration initiated a study, by leading small business advocates, to determine the merits of creating a new "small business administration". This study included the review of the RFC, SWPC, VA and other programs. These initial programs were primarily for providing financial assistance to businesses, but the study committee also found that,



"At the outset it is important to recognize that financing is often not the most acute problem of small business. Lack of technical and administrative knowledge is often more of a handicap to small business than its difficulty in obtaining credit and capital (U.S. Senate, 1953)."

So, in addition to providing financial assistance to small businesses, the new administration would provide counselling, training and management assistance. Congress passed the "Title II act of 1953" (15 USC chapter 14(a)) which created the Small Business Administration (SBA), on July 27, it was signed into law on July 30, 1953. This act later became known as the "Small Business Act of 1953." Its purpose was to make money more available to small businesses and entrepreneurs having little collateral or considerable debts. The money was provided directly by the Small Business Administration performing the function of a lending institution. The SBA was also to provide technical and managerial assistance to the small firms.

The rate of failure for small businesses did change drastically after the creation of the SBA, and new business starts changed from a decreasing trend to an increasing one. It is not known if the increased business starts was due to the assistance provided by the SBA, or simply because of a better business economy.



In 1958, Congress realized the unnecessary burden and conflict with private banking companies, of having the SBA loaning money directly to small business concerns. In response, the "Small Business Investment Act" was signed into law (15 USC 14(b)). The main purpose of this act was to remove the SBA from direct involvement in loan transactions. To do this, a system of licensing new and existing finance companies as, "Small Business Finance Companies" (SBFC), was developed. The SBFC's would now be the instrument to carry out the policy of the Small Business Investment Act. In passing the Small Business Investment Act, Congress Declared the Policy to be,

"to improve and stimulate the national economy in general and the small-business segment thereof in particular by establishing a program to stimulate and supplement the flow of private equity capital and long-term loan funds which small-business concerns need for the sound financing of their business operations and for their growth, modernization, and which are not in adequate supply...(15 USC 661)."

The SBFC's were provided shared capital and were authorized to offer loans to qualified small businesses at a rate, and term, conducive to business. Loans provided by banks under this act proved to be profitable for the lender since they involved limited risk, and the terms of the loan gave the lender the first option for financing addition debt to the



small business.

### The 1960's to the Present

Through the 1960's the Small Business Administration, and its guiding legislation, remained significantly unchanged, except for two major alterations: The Equal Opportunity Act of 1964 and, Executive Order No. 131971. Title IV of the Economic Opportunity Act was to provide loans to low income, socially disadvantaged individuals who could not secure credit at reasonable rates, for the purpose of establishing a small business, in high poverty, high unemployment areas (Chase, 1974). This new loan program was to be administered by the Small Business Administration. The second major event of the 1960's took place on October 13, 1971, when Executive Order No. 131971 was signed by President Nixon. This order stressed the importance of section 8(a) of the Small Business Act (15 USC 6). The executive order recognized that due to economic class, or social prejudice, entrepreneurs may not get the opportunity to start a business, or compete on an equal basis with other firms. To help remedy that problem, the Small Business Administration was to reserve contracts, that met specific criteria, for award to "socially and economically disadvantaged businesses" (15 USC 636).



After the women's movement of the early 1970's, Congress recognized that a significant portion of the U.S. economy was controlled by women owned companies. Executive Order No. 12138 was signed on May 18, 1979 by President Carter. This legislation acknowledged the increasing part women were playing in the United States economy, and recognized that women are sometimes discriminated against. It allowed the women to be recognized as socially disadvantaged, and therefore, eligible for set-aside contracts.

Many amendments to the Small Business Act and Small Business Investment Act (15 USC 14 (a) and (b)) have been passed since 1979, however, their significance when compared to those already discussed, is minor.



CHAPTER 3  
THE SMALL BUSINESS ACT  
AND  
RELATED LEGISLATION

The Small Business Act

Due, in part, to the rate of bankruptcies among small businesses in the early 1950's, and an increasing awareness of the role of small businesses in the U. S. economy; the Congress passed the "Title II act of July 1953". This act later became known as the Small Business Act of 1953 (15 USC 631). It is this act which eventually established the Small Business Administration and set its goals:

"The essence of the American economic system of private enterprise is free competition. Only through full and free competition can free markets, free entry into business, and opportunities for the expression and growth of personal initiative and individual judgement be assured. The preservation and expansion of such competition is basic not only to the economic well-being but to the security of this Nation. Such security and well-being cannot be realized unless the actual and potential capacity of small business is encouraged and developed. It is the declared policy of the Congress that the Government should aid, counsel, assist, and protect, insofar as is possible, the interests of small-business concerns in order to preserve free competitive enterprise...to insure that a fair proportion of the total sales of Government property be made to such



enterprises...(15 USC 631)."

The Small Business Administration's creation is actually authorized under 15 USC section 633 which states,

"In order to carry out the policies of this chapter there is created an agency under the name "Small Business Administration"...under the general direction and supervision of the President and shall not be affiliated with or be within any other agency...The administration may establish such branch and regional offices ...as may be determined by the Administrator..."

In order to achieve the goals set by the Small Business Act, and its later amendments, the SBA was given the authority to carry out the intent of the legislation. Ironically, that authority includes the power to restrict competition in specific circumstances (15 USC 637(a)).

The SBA has the authority to procure services, as a prime contractor for other federal agencies, and subcontract the work to minority owned businesses. They may also restrict contracts to competition among only small businesses which meet specified criteria. Surety bonds and loans may be provided to contractors directly by the Small Business Administration, or through cooperative agreements with



qualifying lending and surety institutions'. The Small Business Administration has also been given the responsibility of providing disaster relief to small businesses, assist agriculture related small businesses, socially disadvantaged businesses, and other businesses that are not dominant in their field.

### SBA Organization

The Small Business Administration is, as has been stated earlier, a large independent government Agency directly under the Executive Branch. All of the key SBA official are appointed by the President and confirmed by the legislature. These official include the Administrator, who reports directly to the President, the Chief Counsel for Advocacy and the Inspector General. The SBA headquarters in Washington also includes the Office of Congressional and Legislative Affairs, Public Communications, Management and Administration, Comptroller, Information Resources Management, Special Programs, Business Development, Finance and Investment, Innovation Research and Technology, Procurement Assistance, Minority Small Business, Capital Ownership, International Trade, and Hearings and Appeals.

- 
1. The Small and Disadvantaged Business (SDB) program, Small Business Set-Aside program, bonding and loan programs will be discussed in greater detail in the following chapters.



The offices of Business Development, Procurement Assistance, Minority Small Business, and Public Communications have the most direct contact with the general public. These offices are responsible for providing management assistance and counsel to small businesses, managing the contract set-aside program, Administering the Small and Disadvantaged Business program, which includes determining who is, or isn't, eligible for the program; and Public Communications office which provides the official interface between the general public and the administration. Like most Government organizations, the SBA has several levels of administration.

Under the national headquarters of the Small Business Administration, the country is broken into 13 regions, with their organizations essentially duplicating that of the Washington organization. Under each regional office, the SBA is broken into geographic districts, usually consisting of a single state or territory. These districts also have organizations similar to the parent regional office, except, the districts do not have a procurement assistance program. Procurement assistance is a national program managed at the regional level.



In addition to the regional and district offices, a Procurement Center Representative (PCR) is assigned to each major federal procurement activity. It is the PCR's responsibility to assist small businesses in locating business opportunities and, through review of purchase requirements, restrict purchases to competition among small business firms. The PCRs act as a liaison between the procurement centers and the SBA, and take the role of small business advocate at the local level.

Each office, location and level, within the Small Business Administration, works independently within its specialty (e.g. Business Development works independent of the Procurement Assistance people, within the same district and region), until a problem or specific assistance is required of another office (Parker, 1988).

#### Relationship with other Agencies

Since the Small Business Administration is responsible for carrying out the government's small business policies, it must be able to direct the procurement actions of the other federal agencies. The SBA obtained that authority from the Small Business Act;



"For the purpose of preserving and promoting a competitive free enterprise economic system. Congress hereby declares that it is the continuing policy and responsibility of the Federal Government to use all practical means and to take such actions as are necessary, consistent with its needs and obligations and other essential considerations of national policy, to implement and coordinate all Federal department, agency, and instrumentality policies, programs, and activities in order to: foster the economic interests of small business; insure a competitive economic climate conducive to the development, growth and expansion of small businesses; establish incentives to assure that adequate capital and other resources at competitive prices are available to small business; reduce the concentration of economic resources and expand competition; and provide an opportunity for entrepreneurship, inventiveness, and the creation and growth of small business (15 USC 631(a))."

Through the Federal Acquisition Regulations (FAR) and related legislation, (Such as the Defense Federal Acquisition Regulations (DFAR) and Surface Transportation Act of 1982), the Small Business Administration is given specific authority to set procurement goals for each federal agency, and regulate their contracting actions within the authority of the SBA programs. The FAR reads,

"This part implements the acquisition-related sections of the Small Business Act (15 U.S.C. 631 et seq.), applicable sections of the Armed Services Procurement Act (10 U.S.C. 2301 et seq.), the Federal Property and Administrative Services Act (41 U.S.C. 252), and Executive Order 12138, May 18, 1979 (48 CFR 19.000 (a))."



The text of this legislation goes on to state that the law covers the following actions, when the contracts takes place within the United States, its territories and possessions, Puerto Rico and the Trust Territories of the Pacific Islands:

1. The determination that a concern is eligible for participation in the programs identified in this part;
2. The respective roles of executive agencies and the Small Business Administration (SBA) in implementing the programs;
3. Setting acquisitions aside for exclusive competitive participation by small business concerns;
4. The certificate of competency program;
5. The subcontracting assistance program;
6. The "8a" program<sup>1</sup>;
7. The use of women-owned small business concerns<sup>2</sup>.

In simple terms, the FAR says that any policy established for the enhancement of competition, promotion of small business, and administered by the Small Business Administration, will apply to all federal acquisitions, except at locations outside of the United States and its territories.

- 
1. Refers to the Small and Disadvantaged Business (SDB) program, which derives its informal name from where it is found; section 8(a) of the Small Business Act. This program may also be incorrectly referred to as the Minority Business Set-Aside program.
  2. The SBA no longer has a set-aside program for woman owned businesses. Woman owned businesses are no longer considered a minority and therefore, do not qualify as socially disadvantaged under the Small Business Act (Parker, 1988).



### Small Business Defined

The Small Business Administration does not have a single definition of what constitutes "small", when referring to a business. In general, a small business is defined as an enterprise, "which is independently owned and operated and which is not dominant in its field of operation. In addition ...the Administrator, (The Small Business Administration) in making a detailed definition, may use these criteria, among others: Number of employees and dollar volume of business..." (15 USC 632). The SBA defines different size standards for each industry. For most industries, the size standard is based on the Standard Industrial Classifications (SIC) defined for each industry by the Department of Labor. For many industries the size standard is based on both gross revenue and employment, however, for the construction industry, the size standard is based only on gross receipts. The number of employees is a measure of the average employment over the last 12 months, including full and part time employees. The annual receipts, are defined as the average gross receipts received over the previous three years, less sales of fixed assets, transfers between affiliates and taxes remitted. All construction falls into division C of the Standard Industrial Classification system, and reproduced from (48 CFR 19.102) in table (3.1).



Construction Industry  
Standard Industrial Classification Codes

SIC	DESCRIPTION	SIZE
MAJOR GROUP 15-BUILDING CONSTRUCTION-GENERAL CONTRACTORS AND OPERATIVE BUILDERS		
1521	General Contractors-Single Family Houses	\$17.00
1522	General Contractors-Residential Buildings other than Single Family.....	\$17.00
1531	Operative Builders.....	\$17.00
1541	General Contractors-Industrial Buildings and Warehouses.....	\$17.00
1542	General Contractors-Nonresidential Buildings, Other than Industrial Buildings and Warehouses.....	\$17.00
MAJOR GROUP 16-CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION-GENERAL CONTRACTORS		
1611	Highway and Street Construction.....	\$17.00
1622	Bridge, Tunnel and Elevated Highway Construction.....	\$17.00
1623	Water, Sewer, Pipe Line, Communication and Power Line Construction.....	\$17.00
1629	Heavy Construction, Except Dredging, N.E.C.....	\$17.00
1629	Dredging and Surface Cleanup Activities....	\$ 9.50

TABLE (3.1)



Construction Industry  
Standard Industrial Classification Codes

SIC	DESCRIPTION	SIZE
MAJOR GROUP 17-CONSTRUCTION-SPECIAL TRADE CONTRACTORS		
1711	Plumbing, Heating (Except Electric), and Air Conditioning.....	\$ 7.00
1721	Painting, Paper Hanging, and Decorating.....	\$ 7.00
1731	Electrical Work.....	\$ 7.00
1741	Masonry, Stone Setting, and Other Stone work.....	\$ 7.00
1743	Plastering, Drywall, Acoustical, and Insulation Work.....	\$ 7.00
1751	Carpentering.....	\$ 7.00
1752	Floor Laying and Other Floor Work.....	\$ 7.00
1761	Roofing and Sheet Metal Work.....	\$ 7.00
1771	Concrete Work.....	\$ 7.00
1781	Water Well Drilling.....	\$ 7.00
1791	Structural Steel Erection.....	\$ 7.00
1793	Glass and Glazing Work.....	\$ 7.00
1794	Excavating and Foundation Work.....	\$ 7.00
1795	Wrecking and Demolition Work.....	\$ 7.00
1796	Installation or Erection of Building Equipment, N.E.C.....	\$ 7.00
1799	Special Trade Contractors, N.E.C.....	\$ 7.00

Notes: Size standards preceded by a \$ are in millions of dollars

N.E.C.: Not Elsewhere Classified.

Mining and Quarrying of non-metallic minerals, except fuels, are included under major group 14. All SICs under this grouping, related to the construction industry, have size standards of 500 employees.



CHAPTER 4  
SMALL BUSINESS SET-ASIDE PROGRAM

What is a Small Business Set-Aside

The Small Business Administration, relies to a great extent, on the small business set-aside program to accomplish its aim of assuring the preservation and expansion of small business. The set-aside program attempts to ensure small business receives its "fair proportion" of the federal procurement dollar (15 USC 631). To the knowledge of the author, none of the statutes nor procurement regulations define what is meant by "a fair proportion" of government procurement. One training manual described it as follows:

"the amount of contract awards small business would receive if all the existing techniques for aiding and assisting small business were conscientiously applied by all personnel. If all solicitations susceptible to set-aside were in fact set aside, if small businesses were solicited in every case where they had the capability, and if no technical or other barriers were improperly utilized...(NAVMAT, 1985)."

The small business administration acknowledges that there are certain contracts, which because of size, complexity, bidding climate, or other reasons; big business is not interested in competing (Pitman, 1988). The proportion of these contracts



is relatively small, and changes from day to day due to; fluctuations in the economy, the large firm's work load and, the business goals of a particular firm. The government, therefore, tries to stabilize the availability of work for the smaller firms by setting aside contracts that could be successfully competed among the smaller firms. Before we can discuss how a contract is set aside, we must first define what a Small Business Set-Aside is.

#### Set-Aside Defined

The latter portion of chapter 3 provided the reader with the definition of a small business, as it relates to most of the SBA legislation. Those size standards apply to firms participating in the Set-Aside program, however, some of the programs have different, specific, size limits that differ from those listed in table (3.1). One such program is the bond program presented in chapter 6.

Small business, as it relates to the Set-Aside program, has been defined, but the meaning of set-aside has not been explained. A set-aside is a contract, which because of the scope or any of a number of criteria, has been designated for award to only a qualifying small business. The contract may be designated as one of two types of set-asides; complete set-aside and partial set-aside.



The complete set-aside, as the name implies, reserves the entire contract for bidding by small businesses. While the partial set-aside may be divided into smaller segments, and awarded as two or more contracts. In order to make a project into a partial set-aside it must first meet several conditions:

1. The contract must be separable into two or more economic production runs, lots, or complete usable facilities.
2. There must be two or more responsible small businesses who could furnish a severable portion of the contract.
3. Two or more small business offerors must bid, otherwise, a partial set-aside will not be made.

With the partial set-aside, the size of the portion of the contract set-aside, will be only large enough to make maximum use of the capacity of the small business bidding on the contract. The remainder of the project is advertised as an unrestricted contract<sup>1</sup>, open to bidding by any size firm. Once the unrestricted segment of the contract has been awarded, the set-aside portion is priced according to the highest unit price in the non set-aside segment (NAVMAT, 1985). The number of set-aside and partial set-aside contracts awarded each year, is somewhat determined by the

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1. Unrestricted competition is often referred to as full and open competition.



established agency goals, and the criteria which govern what contracts are to be set aside.

### Goals

Through the passage of the Small Business Act, Congress obligated itself to ensure the country's small businesses received their "fair share" of the federal contract dollar. To do this the SBA imposed upon itself general goals to strive for. The SBA was also given the responsibility of coordinating and assisting each federal agency in establishing detailed, contracting targets. This responsibility was provided through 15 USC 644 (g), which states:

"The head of each Federal agency shall, after consultation with the Administration, establish goals for the participation by small business concerns, and by small business concerns owned and controlled by socially and economically disadvantaged individuals..."

With the enactment of the National Defense Authorization Act for 1987 (Public Law 99-661), the Department of Defense (DOD) was directed to establish a goal for fiscal years 1987-1989, of awarding 5% of all DOD procurement to small business (SBA, 1987)<sup>1</sup>. Table (4.1) provides a breakdown, by major claimant<sup>2</sup>,

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1. Fiscal Year, abbreviated FY in most federal documents, run from October first of one year through September thirtieth of the following year.



of the goals set for the Navy, by the Assistant Secretary of the Navy, for fiscal years 1987-1988 (Pyatt, 1987). Table (4.1) is a good example of the goals each of the agencies within the Federal Government must develop. It is interesting to compare the relative goals set for the various major claimants. Naval Facilities Engineering Command, responsible for shore structures acquisition and maintenance, has a goal of 75% for small business prime contracts and 56% for set-asides, while Naval Supply has 29.8% and 15.5% respectively.

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2. Major claimant is the top level within a branch of a military organization having responsibility for a specialized function. For example, the Naval Facilities Engineering Command (NAVFAC), is responsible for all facility planning, programming and maintenance. Naval Supply (NAVSUP), is responsible for procurement, storage and distribution of all general commodities. The major claimant is also fiscally responsible for the subordinate commands below him.



FISCAL YEAR 1987-1989  
SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS  
CONTRACTING GOALS

<u>ACTIVITY</u>	<u>SMALL BUSINESS PRIME CONTRACT<sup>1</sup></u>	<u>SMALL BUSINESS SET-ASIDE<sup>1</sup></u>	<u>SMALL BUSINESS SUBCONTRACT<sup>2</sup></u>
MARINE CORPS	40.5%	23.5%	N/A
NAVFAC <sup>3</sup>	75.0%	56.0%	55.0%
NAVAIR	1.7%	0.6%	25.7%
SPAWAR	12.5%	2.5%	N/A
NAVSEA	7.0%	4.5%	39.0%
NAVSUP	29.8%	15.5%	39.0%
ADPSO	17.0%	4.0%	N/A
JCMPO	0.4%	0.1%	N/A
SSPO	0.3%	0.1%	N/A
MSC	15.0%	6.5%	N/A
ONR	43.0%	3.6%	12.0%
TOTAL NAVY	15.2%	8.7%	30.9%

Table (4.1)

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1. Presented in total dollars awarded by the Navy to United States business firms.

2. Presented by percent of total subcontractor dollars awarded by large business prime contractors on Navy contracts.

3. NAVFAC refers to the Naval Facilities Engineering Command. NAVFAC is the command within the Navy responsible for all Navy and Marine Corps construction projects and most facilities maintenance.



FISCAL YEAR 1987-1989  
SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS  
CONTRACTING GOALS

<u>ACTIVITY</u>	<u>SMALL DISADVANTAGED BUSINESS PRIME CONTRACT<sup>1</sup></u>	<u>SMALL DISADVANTAGED BUSINESS SUBCONTRACTS<sup>2</sup></u>
MARINE CORPS	11.4%	N/A
NAVFAC <sup>2</sup>	6.4%	26.4%
NAVAIR	0.3%	4.6%
SPAWAR	5.3%	N/A
NAVSEA	3.8%	4.5%
NAVSUP	7.7%	18.3%
ADPSO	2.9%	N/A
JCMPO	0.06%	N/A
SSPO	0.02%	N/A
MSC	0.2%	N/A
ONR	5.5%	1.2%
TOTAL NAVY	5.0%	5.0%

TABLE (4.1) Cont'd



## Set-Aside Criteria

Previously in this chapter, it was mentioned that the number of contracts set aside is partially determined by the agency's small business goals. The factors which play a more important role in determining if a contract will be set aside are:

1. Estimated cost of construction.
2. Demonstrated interest in the contract by small contractors.
3. Scope and complexity of the work.
4. Competency of the bidding contractors.
5. Receipt of responsive offers.

The estimated cost of construction is undoubtedly the first criteria considered in determining if a contract will be set-aside. The laws regulating procurement by the Federal Government, until recently, set a dollar value of \$10,000 as the threshold for mandatory small business set-asides. The legislation reads as follows:

"Each contract for the procurement of goods and services which has an anticipated value of less than \$10,000 and which is subject to small purchase procedures shall be reserved exclusively for small business concerns... (15 USC 644(j))."



The threshold amount for mandatory set asides is now \$25,000 as amended by Public Law 99-661 (SBA, 1987).

Contracts between \$25,000 and \$2,000,000, are usually set-aside. It is the exception rather than the rule, not to set a contract of this dollar value aside, for a contract of this size to be solicited on a unrestricted basis, the contracting agency must provide written justification, which is subject to the concurrence of the Small Business Administration<sup>1</sup> (Daugherty, 1988). Contracts over \$2,000,000 are reviewed on a case by case basis for set-aside determinations. If two or more reasonable offers can be expected from small business concerns, the contract will be reserved for the set-aside program.

A contract may be set aside because a contractor has demonstrated some interest in the project. This criteria is usually more prevalent when dealing with 8(a) contracts. A contractor may demonstrate interest in several ways. He may inquire about a particular contract, either to an SBA procurement assistance official, or the contracting officer.

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1. The SBA has final authority in determining both the small business size standard for a contract and the decision to set a contract aside (13 CFR 121.11, and 48 CFR 19.505). This paper presented size standards in table (3.1) for various construction related fields. The standards presented may be altered by the SBA within and among programs. For instance, different size standards exist for the set-aside program, SBA loans, and Small Business Investment Corporation.



He may include his company name on the contracting officers bidders list, or he could enroll in the SBA Procurement Automated Source System (PASS).<sup>1</sup>

The PASS system is a computer database which lists company names, products, location and many other business statistics. The PASS database can be used much like a computerized bidders list and source guide, for determining what contracts might be interested in.

The scope and complexity of the work plays a big role in the decision to set aside a contract. The contracting officer must determine if he can reasonable expect to have two or more bidders. The complexity and extent of the work will eliminate many of the otherwise interested contractors. The complexity criteria ties closely to the fourth criteria listed. If a bid is received from a firm that has had a questionable performance history, or limited experience, the contracting officer may require a competency determination prior to awarding the contract.

The Small Business Administration is empowered, through 48 CFR 19.6, to issue Certificates of Competency (COC) to contractors who have been deemed non-responsible, by a

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1. Refer to Chapter 7 and Appendix H.



contracting officer. The Certificate of Competency is a certificate,

"issued by the Small Business Administration (SBA) stating that the holder is responsible (with respect to...capability, competency, capacity, credit, integrity, perseverance and tenacity) for the purpose of receiving and performing a specific Government contract (48 CFR 19.6)."

The COC is only issued after a thorough review of the contractors past performance, financial status<sup>1</sup>, business experience, and other areas, of concern to the contracting officer or the SBA, including personal integrity of the firms owners, managers and board of directors.

Item five in the list of set aside criteria was, receipt of responsive offers. This includes not only offers that have met the administrative requirements of the contract, such as bid bonds, timeliness etc., it also includes the bottom line cost of the bid. The contracting officer will determine a bid to be non-responsive, if it exceeds what the contracting officer determines is a fair market price<sup>2</sup>.

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1. The SBA will not issue a COC to contractors who exceed \$3.5 million in gross receipts or who have debt to working capital ratios in excess of 10:1.

2. Often taken as 110% of the government estimate. For military contracts awarded under the 8(a) program the Defense Acquisition Regulations (DFAR) define a reasonable price as being 10% in excess of the government estimate (DFAR 19.7000).



Contracts in excess of \$10,000 require that a small business contracting plan be submitted, and that all subcontracts include a minority subcontractor clause (15 USC 637). Failure to provide such a plan with the bid documents may also constitute a finding of non-responsiveness.

#### Qualification for Set-Aside Contracts

A small business may become eligible for set-aside contracts through a self-certification process. The FAR states,

"To be eligible for award as a small business, an offeror must represent in good faith that it is a small business at the time of written self certification... (48 CFR 19.301)"

The self certification's reference to, "small business," requires that the firm meet the size standards specified in the particular contract's bidding documents. To make the certification procedure simple, and encourage maximum participation in the set-aside program, the FAR requires



that the contracting officer accept the contractors self certification:

"The contracting officer shall accept an offeror's representation in a specific bid or proposal..." (48 CFR 19.301 (b))

In the event the certification is challenged, or the contracting officer has reason to question the contractors ability to perform the work, the SBA has established formal grievance procedures.

#### Award Priority

Set-Aside contracts are awarded to small business on a priority basis, in order to maximize the potential social benefits of government contract. The award priorities are based on price, social class of the offeror, economic condition, and unemployment rate in his primary area of operation. Assuming several bids have been received and all are found to be responsive, responsible bidders, the award will be determined by the priorities set by 15 USC 644 (e) and (f). The priorities are:

(1) small business concerns located in labor surplus areas, on the basis of total set-aside;

(2) small business concerns, on the basis of total set-aside;



- (3) small business concerns located in a labor surplus area, on the basis of partial set aside;
- (4) small business concerns, on the basis of partial set-aside.

Contractors not meeting the small business criteria will be awarded contracts based on total set-aside, in the order defined in 15 USC 644 (f):

- (1) contractors who are not small business;
- (2) and will perform a substantial proportion of the production on those contracts and subcontracts within areas of concentrated unemployment.

In addition to the Small Business Set-Aside program, the SBA has established another similar program designed primarily to assist "socially and economically disadvantaged individuals."

### Chapter Summary

The Small Business Set-Aside program is the primary means by which the SBA attempts to ensure small businesses receive their "fair share" of the Federal procurement dollar. Set-Aside contracts are those which have been selected by the contracting agency, the SBA, or a particular contractor, and for which the agency believes it will receive at least two



reasonable offers from small businesses.

Small businesses become eligible for participation in the Set-Aside program through a self certification process. In this process they represent, in good faith, that they are a small business. By law, the contractor's representation, must be accepted by the contracting officer.

Through establishing small business contracting goals, each government agency ensures adequate contracts are available for small businesses to participation. The contracts will then be competitively bid, but only among small businesses, with contract awards being made according to, bid price and level of potential social or economic benefit which may result.



CHAPTER 5  
THE 8(a) PROGRAM

Overview

Since the early 1940's, The Federal Government has attempted to assist disadvantaged individuals start and manage small businesses.. The principal aim of these early programs was to employ the "hard core unemployed", rather than the development of businesses among them. Even with the passage of Title IV of the Equal Economic Opportunity Act, in 1964, federal assistance was still aimed at providing loans to firms who will provide employment for "the long term unemployed (Garvin, 1974)." It wasn't until early 1969 that government assistance changed its emphasis from employing the unemployed, to developing and assisting small businesses who do business in areas of underemployment. This swing in emphasis was due principally to the efforts of the new SBA administrator, Mr. Thomas Kleppe.

At the time of Mr. Kleppe's appointment to the SBA, minorities comprised more than 17% of the nation's population, yet they owned only 3.9% of the United States businesses (Census, 1971). Of these small businesses, over 70% were located in large urban areas and accounted for only 2% of this country's small business receipts (Garvin, 1974). Under the



new administrator, revived importance was placed on the 8(a) program and its use in assisting businesses conducting work in socially and economically disadvantaged areas. The focus on economically and socially disadvantaged areas was because of the statistics previously mentioned, and a study of the Mexican-American community (Grebler, 1971). The study, was able to develop a definition, on which an entire group could be considered socially disadvantaged:

"A category of people, then, can be defined as disadvantaged if society at large has acted by omission or commission to hinder a disproportionate number of its members in the development of their individual abilities."

Mr. Kleppe set a goal for the SBA that would speed up the formation of minority owned businesses. He intended to increase the formation of minority owned business to an annual rate of 10,000 per year by June 1969 and to 20,000 the following year. This goal would be achieved by lending money through nations banks with SBA guarantees, and through management assistance provided by the SBA.

### The 8(a) Program

The 8(a) program, officially known as the Small and Disadvantaged Business Program, is a social program,

"to assist small business concerns owned and



controlled by socially and economically disadvantaged persons to achieve a competitive position in the market place (NAVMAT, 1985)."

Socially and economically disadvantaged businesses are assisted through a prime contractor/subcontractor relationship with the Federal Government. The SBA receives its authority to enter into contracts with other Federal Agencies through the Small Business Act. The legislation reads:

"It shall be the duty of the Administration and it is hereby empowered, whenever it determines such action is necessary or appropriate-

(A) to enter into contracts with the United States Government and any department, agency, or officer thereof having procurement powers obligating the Administration to furnish articles, equipment,...or to perform construction work (15 USC 637)'."

Under the 8(a) program contracts are awarded to qualifying small businesses without competition. The contractors are selected according to their capabilities and the complexity of the contract.

A majority of business failures occur during the early years of a business' life because of management and organizational problems (Dun and Bradstreet, 1984). The SBA

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1. Administration refers to the Small Business Administration.



assists businesses through this rough period by providing management assistance, experience, and self confidence. In addition, the 8(a) program provides work for qualifying contractors with the potential of a reasonable profit with minimal risk.

As a precondition to receiving any management assistance, financial assistance, or participate in the 8(a) program, the contractor is required to develop a business plan<sup>1</sup>. The business plan ensures the contractor has completely thought out what he intends to accomplish in business. Further, it proves to the lending agency and SBA that he has realistic expectations of his demand and the marketplace. The business plan is periodically referred to, and reviewed, during the 8(a) participation period.

Contractors may participate in the 8(a) program for a maximum of seven years. The clock begins ticking after the first contract is awarded to the contractor. At the start of the participation period, the contractor may be given a high percentage of Government contracts, the proportion will be

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1. One of the strategies employed by the SBA, for new firms and those with limited experience, is to fill the firm's portfolio with 8(a) contracts that meet the objects of the firm's business plan. As the firms gain experience, they are encouraged to secure contracts from outside of the 8(a) program, thereby reducing their independence on the 8(a) program. (Pittman, 1988).



reduced as the contractor progresses through his business plan. If the contractor accomplishes his business plan objectives, the business plan will be revised to include higher goals, or the contractor will be "graduated" from the program.

#### 8(a) Contract Identification

Contracts performed under the 8(a) program are selected in the same manner as those for the set-aside program. The contracts may be requested by a qualifying firm after learning of the contract, but usually, the contract is selected by the contracting agency for award through the 8(a) program. On occasion, the Procurement Center Representative (PCR)<sup>1</sup> will identify contracts that should be set aside or awarded through the 8(a) program. These contracts will then be brought to the contracting agency's attention. If the contracting officer concurs with the PCR's recommendation, the contracts will go to the SBA for award to qualifying subcontractors.

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1. The duties of the PCR were briefly discussed in chapter 3.



## Contractor Qualification

In order to receive contracts under the 8(a) program, a contractor must first be a small business. As in the set-aside program, the firm interested in receiving government contracts self certifies itself in regard to size, however, this self certification is subject to the verification of the SBA (13 CFR 121.4). The certification is also for a specific Standard Industrial Code (SIC) and contract. Each time a contractor is considered for award of another contract, his size must again be certified and verified by the SBA (13 CFR 121.4).

In addition to meeting the specified size standard a firm must be determined to be both financially and socially disadvantaged. As it relates to the 8(a) program, a socially and economically disadvantaged small business concern is a firm:

"(A) which is at least 51 per centum owned by one or more socially and economically disadvantaged individuals; or, in the case of any publicly owned business, at least 51 per centum of the stock of which is owned by one or more socially and economically disadvantaged individuals; and  
(B) whose management and daily business operations are controlled by one or more of such individuals (15 USC 637)."



Socially disadvantaged individuals are defined as "those who have been subjected to racial or ethnic prejudice or cultural bias..." because of their identification with a particular social group (13 CFR 121.105). The SBA determines what groups will be included in this category based on four criteria:

1. The group must have suffered the effects of discriminatory practices over which it had no control,
2. The group must have generally suffered from the prejudice or bias,
3. The existence of the conditions in items (1) and (2) above, must have resulted in economic deprivation,
4. The conditions listed in items (1) through (4) must have produced business impediments for members of the group for which they had no control, and which are not common to other small businesses in the same industry (13 CFR 124.105).

Groups included in this category are listed in 13 CFR 124.102 paragraph (b), they include: Black Americans, Hispanic Americans, American Indians, Eskimos, Native Hawaiians, Asian Pacific Americans<sup>1</sup>.

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1. Asian Pacific Americans include persons with origins from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, Laos, Cambodia, Taiwan, Northern Mariana Islands, and Trust Territory of the Pacific Islands. Other groups may be included after consideration by the SBA. Procedures for consideration are included in 13 CFR 124.105 (d).



Economically disadvantaged individuals are defined, first, as "socially disadvantaged individuals..." They must also be individuals whose ability to compete in the market place has been, "impaired due to diminished capital and credit opportunities (13 CFR 124.106)." The status of the individual or firm applying for SBA assistance is analyzed in regard to his personal financial situation, his business financial status, and access to credit and capital; before establishing his status as an economically disadvantaged individual.

The 8(a) program considers the financial status of the business owner and of the business because,

"it is not the intent of the 8(a) program to allow program participation to concerns owned and controlled by socially disadvantaged individuals who have accumulated substantial wealth, have unlimited growth potential and have not experienced or have overcome impediments to obtaining access to financing, markets and resources (13 CFR 124.107)."

Additionally, the firm being considered for a contract award must also be able to perform the contract.

"To be eligible to participate in the section 8(a) program, an otherwise eligible applicant concern must be determined to be one that with contract, financial, technical and management support will be able to successfully perform...(13 CFR 124.107)."



Lastly, the firm must also show that with continuing SBA support, the business will have a reasonable prospect for success at the end of the seven year term of 8(a) participation. So, even if a new firm hasn't had any previous contracts it may still participate in the program, if they can demonstrate a "reasonable prospect for success." A firm may be judged to have reasonable potential, if the firms principals have business experience or experience in the particular field they now intend to enter (Pittman, 1988).

Once a contractor has been qualified for participation in the 8(a) program, he becomes eligible to receive SBA subcontracts. When a contract has been referred to the SBA for contracting through the 8(a) program, the SBA attempts to match the demands of the project with the specific capabilities of a qualified contractor<sup>1</sup>.

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1. Many of the contracting officers interviewed for this paper indicated that SBA selection of contractors was an area of great concern. They felt the SBA did not review the contractors capabilities sufficiently, or did not adequately consider the administrative burden placed on the contracting officer. The GAO supports these contracting officer's opinions in its 1981 report, **The SBA 8(a) Procurement Program - A Promise Unfulfilled** (GAO, 1981). These same contracting officers indicated they seldom have termination or default problems with 8(a) contractors.



## Contractor Selection

The contractors considered for award of a contract must first be classified as small business under the SIC code for that particular contract. A review of the firms financial data, experience and business plan, is then undertaken by the SBA. The SBA attempts to match the contract and contractor to try to compliment the firms business plan.

The contractors ability to be bonded is important in many instances, so along with looking at the ability of the firm to finance and manage the project, the SBA also reviews the firms bonding capacity. In special instances, if the firm cannot be bonded, the SBA can waive that requirement.

"no small business concern shall be required to provide any amount of any bond as a condition of receiving any subcontract...if the Administrator determined that such amount is inappropriate for such concern in performing such contract (15 USC 637(2))."

The requirement for bonds may only be waived if:

1. The SBA takes appropriate measures to protect material suppliers and persons providing labor to the firm receiving SBA assistance,
2. The SBA assists a small business receiving 8(a) benefits, to develop financial and other capabilities as necessary to receive the required bonding,



3. No surety firm will issue the required bonds even with the Title IV guarantee', or
4. The firm is a start up firm and has not been conducting business under the 8(a) program for more than one year (15 USC 637 (4)).

In addition to the qualification criteria already outlined, for construction contracts, the contractor receiving the award must have its principal place of business within the administrative region of the SBA office giving the award (15 USC 637).

#### Contract Award

After the contractor is chosen, both the contractor and contracting officer are notified of the selection. Barring any grievances, the contract price will be negotiated and the contract awarded to the selected subcontractor.

The Small Business Administration is directed by 15 USC 637, as to what methods will be employed for awarding contracts to small businesses. Under part (c) of the same

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1. Title IV refers to the Loan and Surety bond program of the Small Business Act. This program is outlined in chapter 6 of this paper.



legislation, the SBA is authorized to,

"...arrange for the performance of such procurement contracts by negotiating or otherwise letting subcontracts to socially and economically disadvantaged small business concerns'..."

The negotiations are performed by Members of the Minority Small Business and Capital Ownership Development (MSBCOD) staff on behalf of the small business receiving the award<sup>2</sup>. The contractor will be present during the initial negotiation, but usually does not actively participate until later negotiations. The aim of the negotiation is to settle on a mutually agreeable price, that, additionally, is fair and reasonable. For all Federal 8(a) acquisitions, a price within ten percent of the Government estimate is considered fair and reasonable (FAR 19.806-2).

As has already been mentioned, the SBA may take on several roles in addition to that of the prime contractor. During the life of the contract the SBA, for brief periods,

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1. Note that the authorization is only to socially and economically disadvantaged small businesses.
  2. Although the SBA is performing the function of a prime contractor, the negotiation is carried out between the contacting agency and the SBA, yet it is the subcontractors price that is negotiated. The contractual parties in the negotiation are not the SBA and the contracting agency, they are the SBA and the subcontractor.



may assume the role of a contract administrator or project manager. Each of these contracting functions could be accomplished using any of the numerous resources available to the SBA. The extent to which the SBA will perform these functions, or the method employed, largely depends on the particular contract, capability of the contractor, difficulties the contractor is experiencing, and extent of time the contractor has been in the 8(a) program. Unlike the usual Prime/Sub contractor relationship, the SBA becomes directly involved in the subcontractors operation when difficulties are experienced, hence, the multiple roles of the SBA. One must understand, the ultimate objective of the Small Business Administration is to assist small businesses. This objective is pursued by the SBA, regardless of the contractual relationship with the Government.

In almost any other agency, a multiple contracting role, such as the SBA's would undoubtedly be considered a conflict of interest. Yet, it is the "duty" of the SBA to receive contracts from other agencies and award them to private contractors, without competition. At the same time the SBA must ensure the contractor profits from the contract, and still the Government must receive the work for a fair and reasonable price. In addition, if the contractor has difficulty on the contract, the SBA will provide management assistance and even direct management of the work if



necessary. All of these topics will be discussed in more detail later in this chapter and in succeeding chapters.



## CHAPTER 6

### CONSTRUCTION RELATED LOANS AND BONDING

#### The SBA Guarantee Loan and Direct Loan

The Small Business Administration is given authority through 15 USC 636, to issue loans,

"to the extent and in such amounts as provided in advance in appropriation acts...for plant acquisition, construction, conversion or expansion...to any qualified business concern (15 USC 636)".

The same section of the law goes on to state that the loans,

"may be made either directly or in cooperation with banks or other financial institutions through agreements to participate on an immediate or deferred (guaranteed) basis...(15 USC 636)"

In simpler terms, the SBA is allowed to provide financing through direct loans, from the Small Business Administration, or through guaranteed loans from private lenders. Both types of loans are very similar, except with respect to the availability and extent of financing.



## Comparison of SBA Guaranteed and Direct Loans

The amount of money available for direct loans is dictated by the amount appropriated by congress, consequently, it is not always available. The SBA attempts to assist more businesses with the amounts appropriated by limiting the size of the direct loans to less than \$150,000. Additionally, during periods of short money supply, additional restrictions may be imposed. For instance, at the time of the writing of this paper, direct loans were restricted to Vietnam era veterans, disabled veterans and handicapped individuals, or firms owned by or employing handicapped workers. One last pre-condition; before a firm can apply for a direct SBA loan, it must first show that it was turned down by two lending institutions (15 USC 636)<sup>1</sup>. Except for these few restrictions, the SBA guarantee loan and the SBA direct loan are identical.

## Application and Qualification

For a firm to qualify for either of the SBA sponsored loans, the firm must first be a qualified small business. For the purposes of the loan programs; a qualified business is any

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1. This restriction applies when the applicant is applying in a locality of 200,000 people or more. Its justification is so that the SBA is sure that it is not in direct competition with private lenders (Merriday, 1988).



business operated for profit, that meets the size standard discussed in chapter 3, and, who is not dominant in its field. The business however, cannot be one that is, "involved in the creation or distribution of ideas or opinions (SBA, 1987)." Businesses that would fall into this category include non-profit organizations, newspapers, magazines, schools that teach "academic subjects," and broadcasters. Other restrictions include loans to other lending institutions and loans for the purpose of financing real property for investment.

The loan applicant must be able to meet the same credit requirements of a regular commercial loan<sup>1</sup>. In fact, the bank processing the loan application has the first option to finance the loan, it therefore, will have the same credit requirements for the SBA loan. The credit requirements are set by the particular bank processing the loan. The SBA takes

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1. The SBA lists five general pre-qualification requirements:
    1. Be of good character.
    2. Show ability to operate a small business.
    3. Have sufficient capital in an existing firm so that the applicant can operate successfully.
    4. Show past earnings or projected prospects of the firm which indicate ability to repay the loan and other fixed debt.
    5. Have a reasonable amount of personal capital available in order to withstand possible losses, if the venture is a new business.

In addition to these, a reasonable, detailed business plan is required for approval of direct SBA financing (SBA Loans, 1988).



the position that it is new in the banking business, the firms that are processing the guaranteed loans have more experience and have more at stake than the SBA, they therefore, are more qualified to set the lending criteria. Further, the bank is in business to make money, they must then be more responsible for the loans approved (Merriday, 1988). If a loan is turned down by the processing bank, the applicant can request that the loan be processed for an SBA guaranteed loan. Loans will only be guaranteed by the SBA if the applicant is first turned down by the lending institution. If the bank elects to participate in the program, and is willing to finance the loan with an SBA guarantee, then the application is forwarded to the SBA for approval<sup>1</sup>.

Commercial lending institutions may deny a loan for any reason without having to be held accountable for their decision. The Small Business Administration on the other hand, is an arm of the Government, accountable to Congress, the President and the people. For this reason, when applications are received, for either a direct or a guaranteed loan, the SBA must completely review:

- a. business experience,
- b. formal education,

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1. Through participation in the FDIC and FSLIC system, all banks are eligible to take part in the Federal loan programs, however, some banks elect not to process VA or SBA loans.



- c. potential market,
- d. credit history of the firm and principals,
- e. size of loan,
- f. management capability,
- g. business plan,

and other pertinent information relative to the business, the loan, or the market the firm is entering.

#### Loan Terms

As has been explained in the previous section, SBA loans and SBA guaranteed loans go through the same, or more rigid scrutiny than a commercial loan. Part of the reason for this is to help ensure that the SBA is not in direct competition with private lending institutions. To eliminate direct competition, the SBA has stipulated that they will not back a loan unless the local banks have already denied it. In addition, the rates for SBA loans are usually higher than those available commercially. However, the laws do restrict the rate that can be charged by tying it to the prime lending rate:

"The rate of interest on financing made...shall not exceed a rate prescribed by the Administration, and the rate of interest for the Administration's share...shall not exceed the current average market yield on outstanding marketable obligations of the United States (15 USC 636)."



The rates presently "prescribed" by the Small Business Administration are 2.25% and 2.75% above the prime lending rate, for terms up to seven years and over seven years, respectively<sup>1,2</sup>. These rates are the maximums that may be charged, with rates adjusted quarterly (except on direct government loans). A financial institution may extend SBA guaranteed loans at lower rates, depending upon the business prospects presented. The SBA charges 2% of the guaranteed portion of the loan as a guarantee fee. The 2% is in addition to the lending institutions interest rate.

Guaranteed portions of loans run from 85% to 90% of the loaned amount, depending on the size of the loan. The SBA will guarantee 90% for loans up to \$150,000. Loans between \$150,000 and \$500,000 will be guaranteed at 85%. No loans in excess of \$500,000 will be approved. As stated earlier,

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1. The maximum term for an SBA direct or guaranteed loan is 25 years. Terms of this length are only for construction, renovation or major alterations. The law also states that the term may be extended to the estimated completion date of the alterations (15 USC 636).

2. The prime lending rate is taken as the minimum New York prime rate published in the Wall Street Journal on the date the application is received (SBA Loan, 1988).



direct loans are limited to \$150,000<sup>1</sup>.

In addition to the SBA guarantee, the lending institution is required by the SBA, to have the loans collateralized, "or so secured as reasonably to assure repayment (15 USC 636)." The SBA also requires that start-up businesses owners, provide 25% to 30% of the business' capital requirements, before the SBA loans will be approved. This provides an added measure of security to the loan, making the SBA guarantee program more attractive to the lender.

#### Uses of SBA Loans

The SBA backed loan, or direct loan, may be used for almost any normal business function, however, the SBA does reserve the right to refuse the loan, "if it determines that the loan will not benefit the small business concern (15 USC 636)." The legislation specifically states that the loans may also be used for the finance of,

"residential or commercial construction or rehabilitation for sale: Provided, however, That such loans shall not be used primarily for the acquisition of land (15 USC 636)."

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1. In the event a lender decides to request the guarantee, the SBA will take over the loan. In this case, the SBA is allowed to service the loan regardless of the dollar amount. (Merriday, 1988).



Additionally, the legislation does not rule out the use of these loans for the purpose of refinancing existing debt, unless it is simply to prevent a loss to a present lending institution. SBA backed loans may also be used for financing employee trusts, formed for the purpose of taking over an existing small business. The trust must have sufficient capital to obtain 51% of the company stocks and these stocks must be owned by at least 51% of the trust members (15 USC 636).

#### The SBA Small General Contractor Loan

Probably the biggest problem facing construction contractors is, maintaining a positive cash flow. Many research papers have been written on this topic, even entire books have been dedicated to the subject. Construction firms often have difficulty financing the early stages of a construction project due to high capital outlays for materials, and wages. The problem with cash out-flow is further compounded by little or no income in the early phases of the contract. Slight miscalculations, or delayed progress, could be catastrophic for small firms with limited working capital. The construction industry is very volatile, and has a high degree of inherent risk, consequently, banks usually are unwilling to make loans to small construction contractors (Merriday, 1988). To assist small construction firms through



the lean period at the start of construction, the Small Business Administration has developed a Small General Contractor Loan Program.

The Small General Contractor Loan provides working capital to qualified construction contractors for the purpose of project financing, or expanding their existing facilities. This type of loan is provided through a cooperating local lending institution, and is 100% guaranteed by the Small Business Administration.

To qualify for the loan, the contractor must be able to prove that he has been unable to secure a loan from another lender in the vicinity. The SBA does not set any qualification restrictions for this loan, except that the firm be a small construction business, and that the loan be used to cover only direct contract costs. It is also stipulated that the loan not be used for the improvement of certain types of establishments, or for the purchase or improvement of resale property<sup>1</sup>.

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1. Establishments that cannot be financed with a Small General Contractor Loan include gambling casinos, areas of illegal commerce and trade etc.



The terms of the Small General Contractor Loans are set by the lending institutions, but usually are for a term equal to the contract period. The interest rates charged for these loans are usually slightly higher than regular commercial loans, but the rate is capped at 2.75% over the prime rate. Also, the contractor is limited to one loan per contract, but may receive any number of loans up to a total of \$500,000.

In the event the contractor is unable to repay the loan, the lending institution may elect to try to recover the balance, liquidate the collateral (i.e. place a lean on the project), or recover the SBA guarantee. In fact, at any time during the term of the loan, the lending institution may request that the SBA take over the loan, and honor its guarantee.

#### SBA Bonding

Most commercial surety companies prefer to restrict their business to large construction firms, having business volumes in excess of \$20 million, and net worth in excess of \$40 million (Merriday, 1988). Construction firms that fall within this financial category present a reduced risk of default, and a higher business volume for the surety company. As a consequence, it is often difficult for smaller firms, particularly new businesses, to receive bid, payment and



performance bonds. Unfortunately, all Federal contracts in excess of \$25,000 and most large private contracts require bonding.

To overcome the bond restriction, the SBA developed the Bond Program in 1970. The law states:

"The Administration may...upon such terms and conditions as it may prescribe, guarantee and enter into commitments to guarantee any surety against loss, as hereinafter provided, as the result of the breach of the terms of a bid bonds, payment bond, or performance bond by a principal on any contract up to \$1,000,000<sup>1</sup> (13 CFR 694(b))."

As with all of the SBA programs, the recipient of the bond must be a qualifying small business, however, the size limit for the bond program is much smaller than for most of the other SBA programs. A company requesting an SBA backed bond cannot exceed \$3.5 million gross per year, for the three previous years<sup>2</sup>.

#### Bond Qualifications

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1. The value of the contract limit was recently amended to \$1,250,000.

2. For new firms, the first year projected gross receipts cannot exceed the \$3.5 million limit.



As with SBA backed loans, the commercial surety firm which the contractor is applying through, has the first option on providing the requested surety. Only after the commercial firm has refused to provide the bond, can it be backed by the SBA. If the surety company decides that it will issue the bond with an SBA guarantee; in addition to the size limit mentioned above, the firm applying for a bond must also meet several additional prerequisites:

1. The bond must be a requirement of the contract and is needed for a contractor to bid on the contract, or to serve as the prime contractor,
2. The firm is unable to receive a bond at reasonable terms and conditions without a guarantee by the SBA,
3. The Administration determines that there is a reasonable expectation that the contractor will perform the contract,
4. The contract meets the Administrations requirements for feasibility and reasonableness of cost, and
5. The conditions of the bond and fees assessed are reasonable in light of the contract risks and requirements (13 CFR 115.1)

If all of the listed preconditions are met, the application would then be reviewed by the SBA using essentially the same criteria, and scrutiny, as for loan applications (Merriday, 1988). The applicant's credit history, business experience, education, expertise, and financial status will be reviewed. Firms who recently received SBA backed bonds, may not be reviewed again, provided the contract, for which he now



requires a bond, is of similar nature and size(Merriday, 1988)<sup>1</sup>.

The SBA guaranteed bond program was created to make bonds available to small contractors. To do this, a number of the qualification requirements used by commercial surety companies needed to be relaxed. Unlike the requirements for commercial bonds, the SBA backed bond, only requires an equity to working capital ratio of 10:1; roughly one fourth of that required for commercial bonds. Further, existing firms need only show a profit over the last three years, as apposed to five for the commercial bonds. These differences, along with the 80% Government guarantee<sup>2</sup>, allows the participating surety company to issue bonds to smaller contractors.

Unlike the loan programs, the surety company does not have the option of relinquishing its bond to the SBA. In fact, in the event the contractor fails to perform in accordance with the contract, the surety is responsible for resolving the claim against the bond. Only after the issues have been resolved will the SBA honor the guarantee.

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1. Similar size limits were described to the author, to be not more than 200% of the previous dollar value.

2. The SBA is authorized by 13 CFR 115.1 to guarantee up to 90% of the bond amount, however, the SBA policy is presently to guarantee only up to 80%.



## Conditions and Cost

Although the SBA places several conditions on the contract size a firm may receive bonding for, the SBA places no limit on the number of SBA bonds issued at any one time. Since the firm's expertise, work capacity, and equity/working capital ratio, is checked by the issuing bonding agency, there is no need for the SBA to place a limit on the number bonds held by a company.

A firm will most likely limit the number of SBA bonds it holds because of the cost of the bonds. Again, the SBA cannot be in competition with private firms, and to make it attractive for commercial sureties to offer SBA bonds, the charge for them must be attractive to the bonding company. The legislation authorizing the guarantee of bonds states,

"The Administration shall administer this program on a prudent and economically justifiable basis and shall fix a uniform annual fee which it deems reasonable and necessary for any guarantee issued...to pay administrative expenses incurred... (13 CFR 115.1)"

The present rate charged for the SBA guarantee is \$6 per thousand dollars of bond value, which is intended to cover the



administrative cost of the bond processing<sup>1</sup>. This rate is over and above the commercial bond price, which cannot exceed \$18 per thousand. So, an SBA guaranteed bond may cost up to \$24 per thousand dollars of contract value, as apposed to \$18 or less for a commercial loan.

In addition to the loan and bond programs discussed above, the SBA has several specialty loan programs and general business assistance programs. For the sake of completeness, these additional programs will be discussed briefly in the next chapter.

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1. The processing fees collected are credited to a fund set up exclusively for bond underwriting. The amount in the fund is presently set at \$35,000,000 by 13 CFR 115.1



## CHAPTER 7

### SPECIAL LOAN AND BUSINESS ASSISTANCE PROGRAMS

#### Discussion

Chapter 2, discussed the history of small business assistance programs, but a few points are worth reiterating. As early as 1935 the Government recognized that small businesses suffered because of a lack of adequate long term, and equity financing. A gap existed in the structure of the nations financing institutions which made it difficult for small businesses to receive long and short term debt, investment, and equity capital. To fill this gap, and provide management assistance to the small firms, the Small Business Act of 1953, and the Small Business Investment Act of 1958 were passed.

The Small Business Investment Act of 1958 created the Small Business Investment Companies (SBICs), which were created specifically for providing long term equity and risk capital to small business entrepreneurs. The SBICs were intended to fill the portion of the gap not addressed by the creation of the Small Business Administration.



The Small Business Act created the SBA and empowered it to make loans, "to the extent and in such amounts as provided in advance in appropriation acts...for plant acquisition, construction, conversion or expansion...(15 USC 636)". It did not, however, provide risk capital or equity capital for the small business community, hence the need for the Small Business Investment Company.

Many new assistance programs have been created by the SBA since the start of the Small Business Investment Companies, but the Small Business Administration's loan and bonding programs are undoubtedly the most well known and widely used. Four key factors play a major role in this popularity. First, the programs are among the least restricted of all of the SBA's direct assistance programs, and hence, are available to a wider range of businesses and business owners. Secondly, they are not restricted to utilization by contractors doing business with the Federal Government. All of the programs discussed to this point restricted participation to firms doing business with the Federal Government. It was only after establishing a business relationship with the government that the firm became eligible for any of the programs. Participation in any particular program was then, further restricted by economic factors, race, or social status. Third, These two programs are not directly administered by the Small Business Administration. Both programs are administered



and managed on a daily basis by private lending and surety institutions, providing a broader coverage area from which individuals can be exposed to the programs. Lastly, the programs do not depend on public awareness of them for utilization. Banks and surety companies are the only institutions who must be aware of the programs. It is the loan or surety company who decides whether to use the SBA guaranteed loan or bond, not the applicant. In addition to these two well known programs, which were discussed in the last chapter, the SBA has a number of loan and management programs that are not as well publicized.

#### Loan Programs

The Small Business Administration offers eleven loan programs to the community, businesses, and entrepreneurs. The loans are available for disaster recovery to capital investments and equity capital for risk investment. Each loan program has rates and terms which are commensurate with the risk, potential return, and monetary value involved. Usually these rates are slightly higher than commercial loans and are limited in the amount of capital available.

By involving private investment companies in business development, the SBA is able to limit the impact its funding shortfalls have on the business development programs it



sponsors. One such program is the Small Business Investment Company<sup>1</sup>. The SBICs are privately owned and operated, profit making, investment firms that are privately capitalized. The SBA only provides leverage capital, licenses and regulates them. Since the SBICs are to be profit making organizations, the board of directors determines qualification criteria and Loan terms.

It is primarily through the SBICs, that the SBA makes venture capital available to small business entrepreneurs. Capital is made available in two ways; conventional loans, and equity loans. Because the SBIC's are looking for a high return on a limited number of investments, loans are usually in large sums and at rates slightly higher than conventional loans, (Merriday, 1988). The SBIC will provide equity loans when it feels the applicant has a better than average chance for significant profit. In this case, the SBIC assistance is limited to less than a controlling interest in the firm.

A program very similar to the SBIC program is the Local Development Company program. A Local Development Company is an organization of local businessmen and political leaders who have formed a corporation to promote the development, or

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1. The SBA also has a Minority Enterprise Small Business Investment Company (MESBIC) which is limited to assisting social and economically disadvantaged businesses.



improvement, of a specific locality. This program combines local investments with SBA grants. Through local lending institutions, area businesses may receive loans. 40% of the sum loaned by the bank is then matched by the SBA. These loans may be used for plant acquisition, construction, conversion, expansion, land acquisition or machinery and equipment purchases. In the event the construction or equipment acquisition is for pollution control devices, the SBA has a special program to assist small businesses in this area.

In cooperation with: financial institutions, the Federal Government, State and Local agencies, the SBA provides financial assistance to small firms for the purpose of planning, design and construction of government mandated pollution control facilities. Under this program loans may be long term, and up to \$500,000. Pollution Control Loans are 100% guaranteed by the SBA. Only businesses that are at an operational or financial disadvantage with respect to similar businesses, are eligible for these loans. Eligibility determinations are made by the SBA Pollution Control Financing staff in Washington, D.C. (SBA OPC-2, 1987).

Homes and businesses may be damaged by hurricanes, floods, tornados and other natural disasters. Catastrophic damage causes hardship and economic losses for individuals and



the community. When the President or the Administrator of the Small Business Administration, declares an area to be a disaster, the SBA may assist the affected communities with two types of loans: the Physical Disaster Loan, and the Economic Injury Disaster Loan.

The Physical Disaster Loans are made to homeowners, renters, businesses (large and small), and nonprofit organizations, for the repair or replacement of their property and businesses. Disaster loans will usually be provided by a commercial bank, with the SBA providing an 80% guarantee. The amount loaned cannot exceed the replacement or repair cost of the property, and is only provided when the property is not insured.

The Economic Injury Disaster Loan is strictly to assist small businesses in declared disaster areas. The small businesses must have suffered substantial economic losses, due to a disaster, before they are considered eligible for the loans. Loans issued under this program may be used for working capital, and to pay financial obligations which could have been met had the disaster not occurred.

Three additional small business loan programs are the Energy Loan, Handicapped Assistance Loans and Seasonal Line of Credit Loan.



The Energy Loan program attempts to promote competition in the alternative energy and energy conservation fields, by offering credit to small firms engaged in the development, manufacture, marketing, service, installation or maintenance of energy conservation equipment.

Handicap loans help small firms that are owned by or employ handicapped individuals. The loans may be used for renovating the facilities to accommodate handicapped individuals or for general business needs.

Lastly, the Seasonal Line of Credit loan provides working capital to retailers who are engaged in highly seasonal sales. The line of credit provides money for the purchase and restocking of seasonal commodities.

#### Business Development and Management Programs

In addition to the programs directly supported, managed and funded by the Small Business Administration, there are several resources available to small business firms, that work in partnership with the SBA. These resources include the Senior Corps of Retired Executives (SCORE), Small Business Development Centers (SBDC), and Small Business Institutes (SBI). Each of these organizations provide an array of



services from general business counselling, to researching specific production problems. The services are completely free to the small businessman.

#### SCORE

SCORE is an independent counselling organization working in partnership with the Small Business Administration, to provide advise and counselling assistance to small business managers. It has 388 chapters throughout the country, with over 12,500 counsellors and an additional 400 satellite chapters.

The SCORE counsellors are retired executives, who give of their time and expertise, to provide counselling services to businesses experiencing problems, doing well and want to expand, or to entrepreneurs who are considering going into business. The counsellors expertise covers all facets of business in most industries, so when a request for counselling is received, SCORE attempts to match the problem and firm, with a counsellor familiar with that difficulty in the specific industry.

The SCORE organization provides classroom training, seminars and workshops at a minimal cost, in various locations throughout the SBA region. These training workshops are open



to individuals, and business persons regardless of the size of the company. If enough interest is expressed, special training seminars and workshops can be scheduled, and are usually open to the general public. Appendix H provides samples of the types of seminars offered, and typical workshop and training schedules.

Assistance with many of the SBA forms and application procedure may be received from the SCORE counsellors. This service could include development, and updating of business plans, review of loan requirements<sup>1</sup>, or referral to other SBA programs.

SCORE also serves as a clearing house for the SBA and SCORE studies. Samples of fact sheets, management assistance and training documents, are included in appendix H.

#### Small Business Development Centers

The Small Business Development Centers are located at many colleges and universities across the country. They are usually staffed by senior management students, and supervised by a management faculty member. The SBDCs provide many of

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1. Often new business owners will apply for loans only to be turned down by the bank. The score counsellors will assist in evaluating what capital is actually needed or suggesting alternatives to debt capital.



the same counselling services as the SCORE organization, however, this program also provides hands on experience for the students. It has the added advantage of having the university's resources available for research and field studies.

The SBDCs are funded by grants from Congress, and so, the services provided like the SCORE counselling, is free. When a firm experiences a problem which is common within an industry, or demonstrates a salient point, copies of the counselling notes will be published and distributed to the SBA and SCORE office. Copies of construction related "Counselling Notes" are also included in Appendix H.

#### Small Business Institutes

Small Business Institutes are also located at the major universities and colleges. The SBIs primarily provide investigative and technical research services to small businesses. The SBIs are provided, not only the research facilities at the particular university, but also the entire research capability of the Federal Government. Small businesses, through the Small Business Institutes, are given access to the research facilities of the National Science Foundation, National Aeronautics and Space Administration, Department of Defence and others (15 USC 648). These services



are again provided free of cost.



CHAPTER 8  
SBA EVALUATION SYSTEM

Goals and Evaluation

Recall from chapter 3, that the intent of the Small business act was to, "aid, counsel, assist and protect...the interests of small business (15 USC 631)." The SBA, through its relationship with other government agencies, was given the responsibility to create a business atmosphere which would: foster the economic interests of small business, insure a competitive economic climate, ensure that adequate capital is available to the small businesses at reasonable rates, and provide an opportunity for entrepreneurship and inventiveness. Probably the greatest difficulty which the SBA, and the author faced in researching this paper, is; how does one measure and monitor the performance of the SBA, in its effort to achieve these goals?

Scarcity of Data

Although the Federal Government is known for its extensive paperwork and records, surprisingly little is available specifically on the construction industry<sup>1,2</sup>. This

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1. The Department of Defense spends approximately 80% of the Federal Budget, and it is estimated that 960 million hours were spent processing procurement paperwork during fiscal year



fact is especially surprising when one considers the proportion of the Federal Budget devoted to this industry. In 1983 roughly 32% of the Federal Budget went to construction and maintenance of Federal facilities (SBA, 1984).

The need for a business database was recognized by the Congress in 1976, when it directed the SBA to establish a Small Business Database (SBDB). This database combined several existing data files, from various private and government agencies. The SBDB now contains over 8.1 million establishment records, on a high percentage of non-farm related industries. This system first came on line in 1979. Although capable of providing detailed business data, it is often too limited for detailed industry analysis.

Specific industry data may be obtained from the Dun and Bradstreet Corporation (D&B), and was utilized by the author. Information from this source included the Business failure and start trends. Again, however, the information is limited. The failure rate data provided by D&B was quite extensive and extended well before the establishment of the Small Business

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1983. In response to the paperwork, private contractors spent an additional 330 million hours preparing responses, at an estimated cost of \$3.2 billion (SBA, 1984).

2. A construction industry data base is now being developed by Dr. Wentworth of the Indiana University, in conjunction with the U. S. Census Bureau.



Administration, however, the business start record was begun only in 1985, and was therefore, of little analytical value.

Through a number of discussions with SBA officials, professors, and businessmen, two additional sources for business failure and start data were investigated: the IRS Statistics of Income (SOI) database, and the court system records. The data provided by the IRS would have proved to be prohibitively expensive to search and of limited value. Essentially, all the SOI could provide is the number of construction firms in the United States, and their income. Although no direct count of starts or failures could be obtained, the number of large and small construction businesses could have been derived from this database, by applying the SBA size standards. The second possible source of business failure data, the court system, could have potentially yielded significant data, however, all of the records are filed by case number and not cross-referenced to subject data. This file system would then require a line by line search of the court records; an unrealistic undertaking.

#### Available Data

Significant difficulties were encountered finding data specific to the construction industry, and particularly to



small construction firms. Eventually several Congressional hearing reports, internal SBA documents, General Accounting Office investigations, census data and several other sources were identified. These documents, combined with the SBA annual reports, Dun and Bradstreet information and US Navy records, formed the basis of this report.

#### SBA Reporting System

The key to success for any long term project, is the ability to monitor progress, and the timely receipt of information on which decisions can be made. Public Law 93-400 required the Office of Management and Budget to "establish a system for collecting, developing and disseminating procurement data..." In 1978, the Department of Defense, acting as executive agent for the Office of Management and Budget, developed the Federal Procurement Data Center (FPDC). The responsibility for this reporting system was then transferred to the General Services Administration in 1980.

The Federal Procurement Data System (FPDS) provides a central reporting point for all Federal Procurement Actions. Not until the FPDS was developed were federal procurement actions reported to a central location in a standard format. The FPDS allows Federal procurement actions to be analyzed by region, cost, industry, market, and as an indicator of



regional or socio-economic distress. The FPDS is also used by the legislative and executive branches of government, for analysis of Federal Procurement policy impacts.

The data available to the SBA, through the FPDS and SBDB is updated on a continuous basis. However, analysis based on these inputs is only as accurate as the data imputed. Each of the data bases utilized by the SBA have shortcomings and limitations.

#### Limitations of SBA Data

The Federal Procurement Data System has several limitations which affect the analyses performed by the SBA. The major limitations are discussed below.

The first limitation of the FPDS is that only contract actions over \$25,000 are reported individually, all others are reported quarterly in a summary format<sup>1</sup>. This report threshold is crucial to the analysis of small business procurement. Since small business receives an average of less than 15% of the Federal contract actions over \$25,000, yet approximately 50% of the contract actions under \$25,000, failure to record these transactions has proven to be

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1. Prior to 1983 the reporting limit was \$10,000.



significant. In 1984, failure to report transactions under \$25,000 resulted in only 25% of the Federal/Small Business transactions to be considered in the SBA analysis of the small business share of Federal procurement (SBA, 1984). A second limitation of the FPDS is that only prime contract actions are reported in detail.

Construction Subcontractor data is only available for subcontracts in excess of \$1 million. The data inputs include the cost of the subcontract, but does not identify the service or product procured, hence, it cannot be included in a detailed industry studies. The inclusion of subcontract values has been shown to be significant. In fiscal year 1982, it was estimated by the Small Business Administration, that the small business share of Federal Procurement would have increased from 26% to 34%, had subcontract data been included (SBA, 1984).

Thirdly, the reporting system only requires that the principal product or service code for the contract action be recorded. This limitation would usually be insignificant, for Federal construction programs, since the Federal Government usually procures one principal facility per contract. In the case of a major BOSS contract, however, it could have some



impact'.

The Federal Procurement Data System has several additional limitations, but for the purposes of this paper, they are not significant.

The Small Business Data Base, mentioned earlier, is made up of three components: the Master Establishment List (MEL), United States Establishment and Enterprise Microdata file (USEEM), and the Financial Statement File (FINSTAT). Both the MEL and USEEM data lists supplement Dun's Market Identifier (DMI), from the Dun and Bradstreet Corporation, with additional data lists and configurations. The FINSTAT contains financial data on over 800,000 firms. Included in the data base are balance sheets and profit and loss statements. The SBDB has several limitations, the most significant of which is that the MEL and USEEM data was developed from Dun's Market Identifier files. The DMI files were created for the purpose of providing credit histories on a select population of firms, they therefore, have no scientific or statistical representation of firms in any market or industry.

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1. BOSS is an acronym used by the Navy to describe major contracts whose scope often includes a turn-key, base construction contract, and operation and maintenance of that installation.



In spite of the significant limitations of the available SBA data, it is far better than what has been available in the past. The SBDC files are the first extensive microdata file developed for Federal statistical analysis (SBA, 1984). In addition, the SBDS has the ability to sort its records by business size, location, transaction amount, owner, and many other record fields; making it a very flexible tool for measuring the effect of federal policy on particular areas of the economy.

#### Detailed SBA evaluation

The information provided by the various data base systems discussed above, allow the SBA and other agencies to track overall business trends; but what of the individual SBA programs?

The author found, that except for a detailed system of tracking the number and dollar amounts of contracts awarded, the SBA doesn't record any transactions on a national level. It therefore has no periodic evaluation system to determine program effectiveness or utilization. For instance, while discussing the 8(a) program, the author inquired if a firm was watched after graduation from the 8(a) program. The response was that they were tracked, "but not by this office, probably on a national level." Similar responses were received from



at least two different SBA official at different locations and times. Further investigation failed to show that any "after graduation follow-up" is conducted. The actual effectiveness of this and other programs is, therefore, unknown: In a few instances contractors have been hired to study specific areas or programs to analyze its industry impacts.

### Summary

Evaluation of the effects federal policies have had on the small business community has been difficult. Federal policy makers have been hampered by a lack of current, and reliable information on which to base decisions. Further, they have been unable to measure the affects policies have had on small business, due to the same lack of information. As a result, the small business communities contribution to the economy has not been analyzed in a detailed systematic fashion. Only in recent years has the Government taken steps to improve the flow of information to the law makers and general public. However, the reporting system utilized by the SBA still tends to provide macro-level data, while ignoring detailed study of its individual programs.



CHAPTER 9  
CONSTRUCTION INDUSTRY TRENDS

Discussion

One of the primary objectives of the Small Business Administrations is to promote the creation of small businesses for the purpose of ensuring competition. This chapter attempts to analyze, to what extent the SBA programs have limited small business bankruptcies and promoted the creation of new businesses. The chapter will also look at the distribution of employment within the construction industry and how this has changed since the creation of the SBA.

General

The purpose of the Small Business Administration is to foster and protect the interests of small businesses, promote and assist the creation of small business, ensure free and open competition, and strive to eliminate the economic imbalance faced by socially disadvantaged individuals. The SBA attempts to meet these goals through the various programs discussed in the previous chapters. As has been explained, several of the SBA programs attempt to enhance competition through restricting it. One would expect then, that restricted competition would foster higher prices and an



inferior end product. Other programs provide funding to contractors who could not get funding by conventional means. Do these contractors present a larger risk on construction jobs? Do contractors requiring certificates of competency perform to the same degree as other contractors? Have the policies of the Small Business Administration increased competition in the construction industry by fostering the creation of new businesses? Lastly, has the overall performance of the Small Business Administration increased the share of Federal Procurement going to Small Business? The answer to these questions are not easy ones. As explained in the previous chapter, the data available is very limited and fragmented, making in depth analysis next to impossible.

Using information from a number of sources reasonable answer to these questions are provided on the following pages. Where possible references and supporting data are presented.

#### Growth of the Construction Industry

When the Small Business Administration was formed in mid 1953, no records existed which could readily indicate the number of construction firms in the United States. Until the late 1960's no organization undertook the task of making a census of the construction industry. Some organizations such as the Associated General Contractors (AGC), could provide a



rough estimate of the number of construction contractors in the country, but it could not provide the detailed statistics needed for industry studies. As a consequence, the SBA has no benchmark from which to measure progress.

In 1967 the United States Census Bureau conducted the first comprehensive census of the United States' construction industry. Three subsequent census' have been conducted and the results published. The census data shows that the construction industry has increased dramatically since 1967 (Figure 9.1)<sup>1</sup>.

The Census Bureau data, from which figure (9.1) was developed, is assembled in several formats, including by business receipts and employment. The proportion of small business, included in the overall statistic, can be derived by applying the SBA definition of "small" to the Census data. To ensure statistics for each census year could be directly compared, the appropriate SBA size standard was converted to constant dollars using a present worth factor of 8%<sup>2</sup>.

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1. Census data is only presented through 1982 because it takes an average of three to four years to assemble and publish each census report. Consequently, the 1987 statistics will not be available until late 1989.

2. The 8% was based on the average Consumer Price Index for the period of consideration.



### NUMBER OF CONTRACTORS IN U.S.

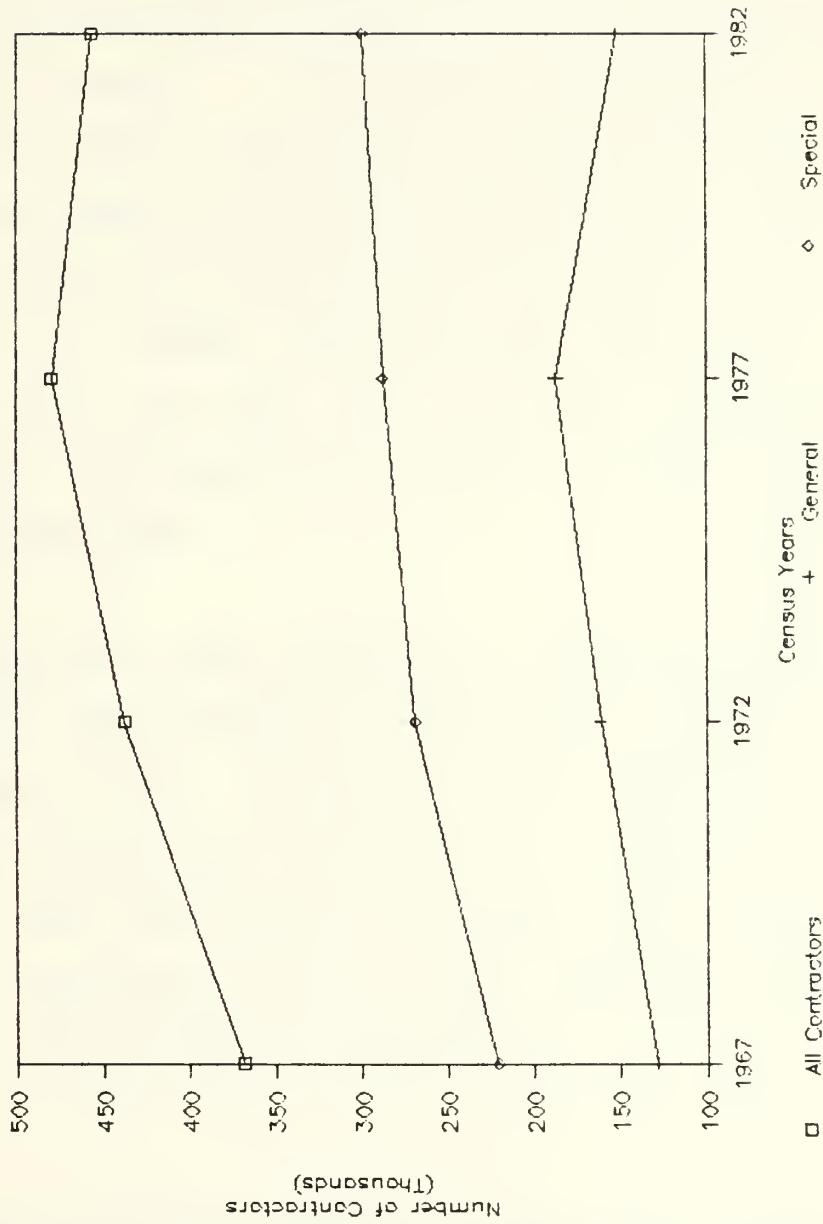


Figure (9.1)



The number of firms falling within the resulting receipt size limit was interpolated, using the straight line method, from the census tables. The results of these calculations are presented in Appendix C of this report.

Figure 9.2 shows that the percent of small contractors has remained relatively unchanged over the period covered by the census reports<sup>1</sup>. The relative proportion of small specialty and general contractors, is shown in figures 9.3 and 9.4. These figures dramatically presents the large portion of the construction industry made up of small contractors. This point is further dramatized by figure 9.5, which indicates that, in 1972, only 2.2% of the construction industry was large business. The author found that this was a typical proportion.

Employment by the construction industry parallels the growth in the overall number of construction firms, discussed above (figure 9.6). However, a more detailed look at construction employment will show that, although the number of small firms has steadily increased, the proportion of individuals employed by small firms, has been erratic, or decreasing. See figures 9.7 through 9.9.

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1. In figure (9.2) and Appendix C, "other small contractors" includes operative builders, developers and subdividers.



NUMBER OF SMALL CONTRACTORS  
AS A % OF ALL CONTRACTORS

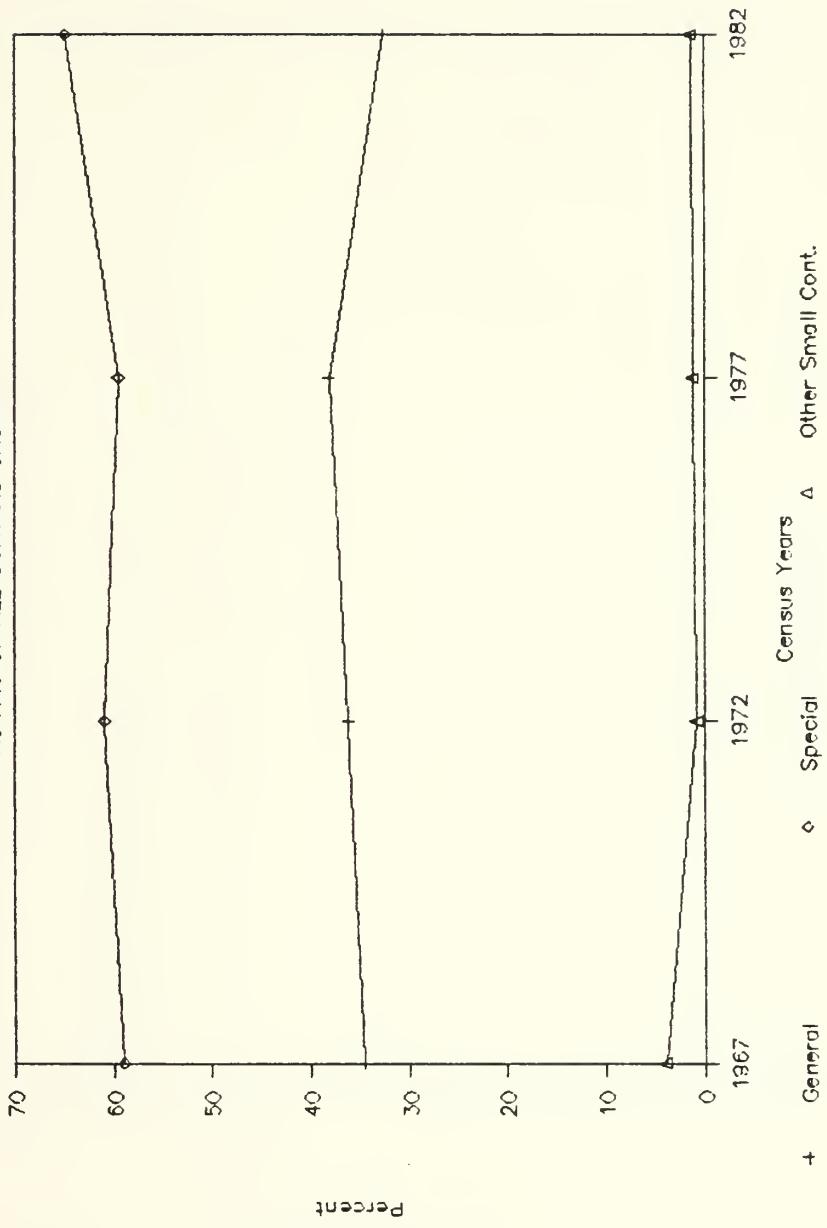


Figure (9.2)



SMALL GENERAL CONTRACTING FIRMS  
AS A % OF ALL GENERAL CONTRACTORS

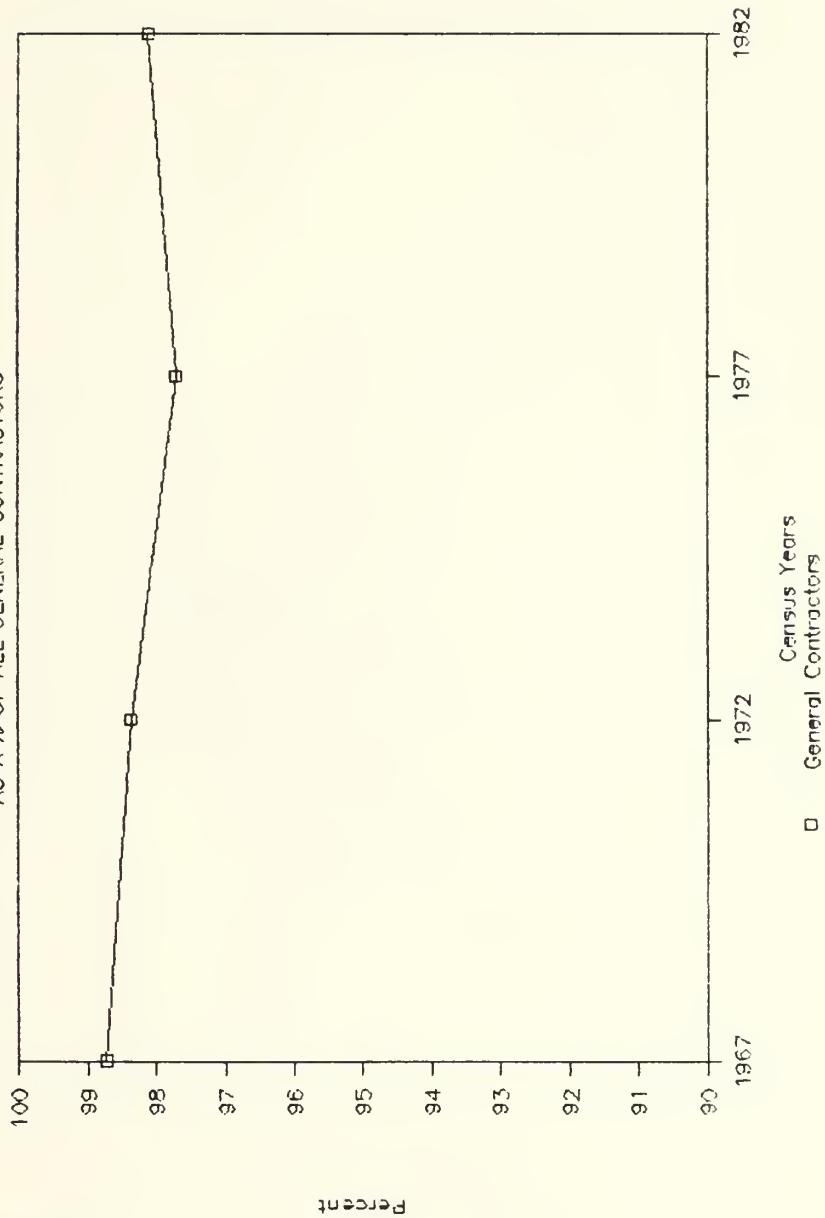


Figure (9.3)



NUMBER OF SMALL SPECIALTY CONTRACTORS  
AS A % OF ALL SPECIAL CONTRACTORS

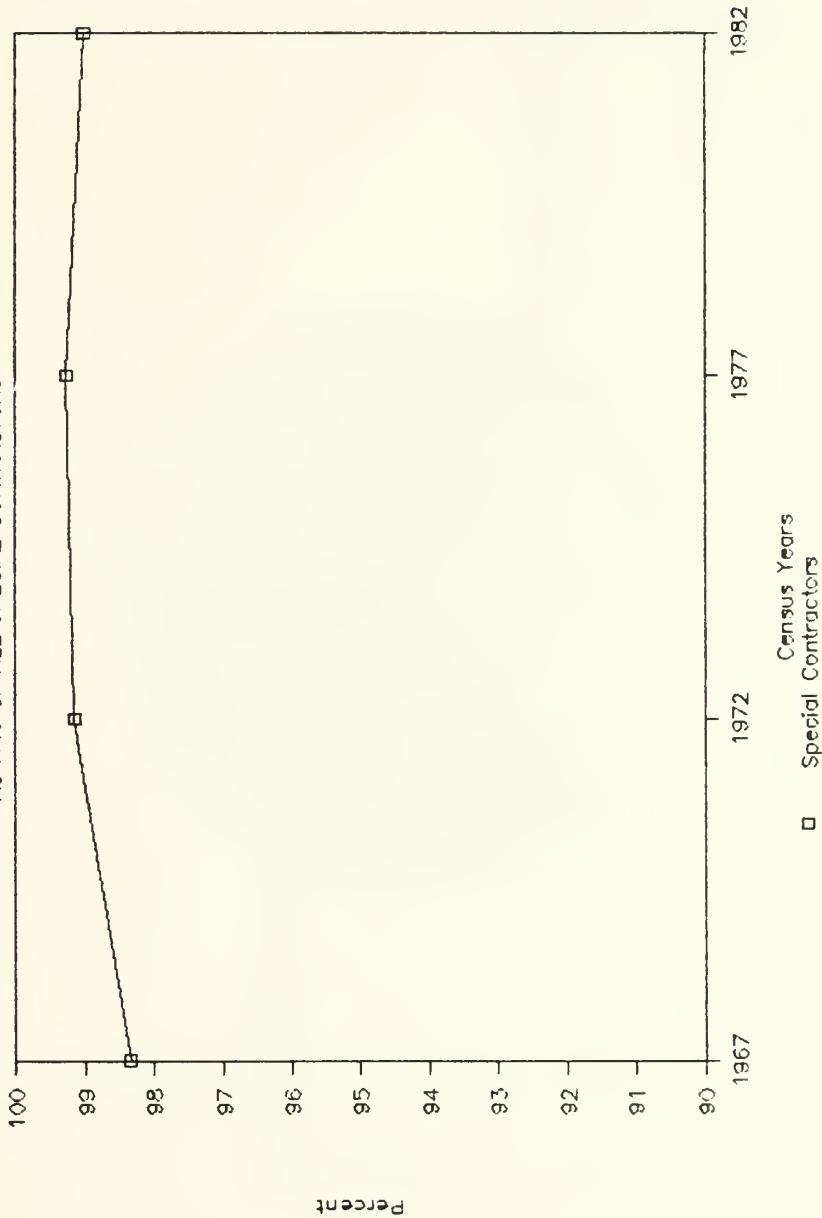


Figure (9.4)



NUMBER OF SMALL FIRMS (1972)  
AS A % OF ALL CONSTRUCTION FIRMS

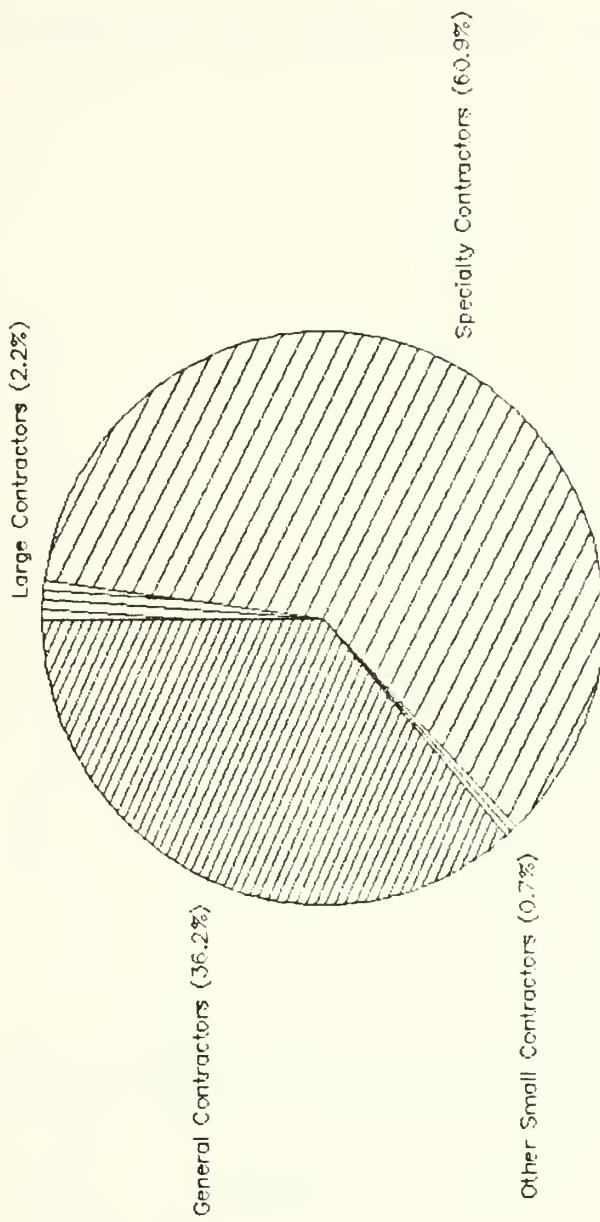


Figure (9.5)



## EMPLOYMENT BY CONTRACTORS

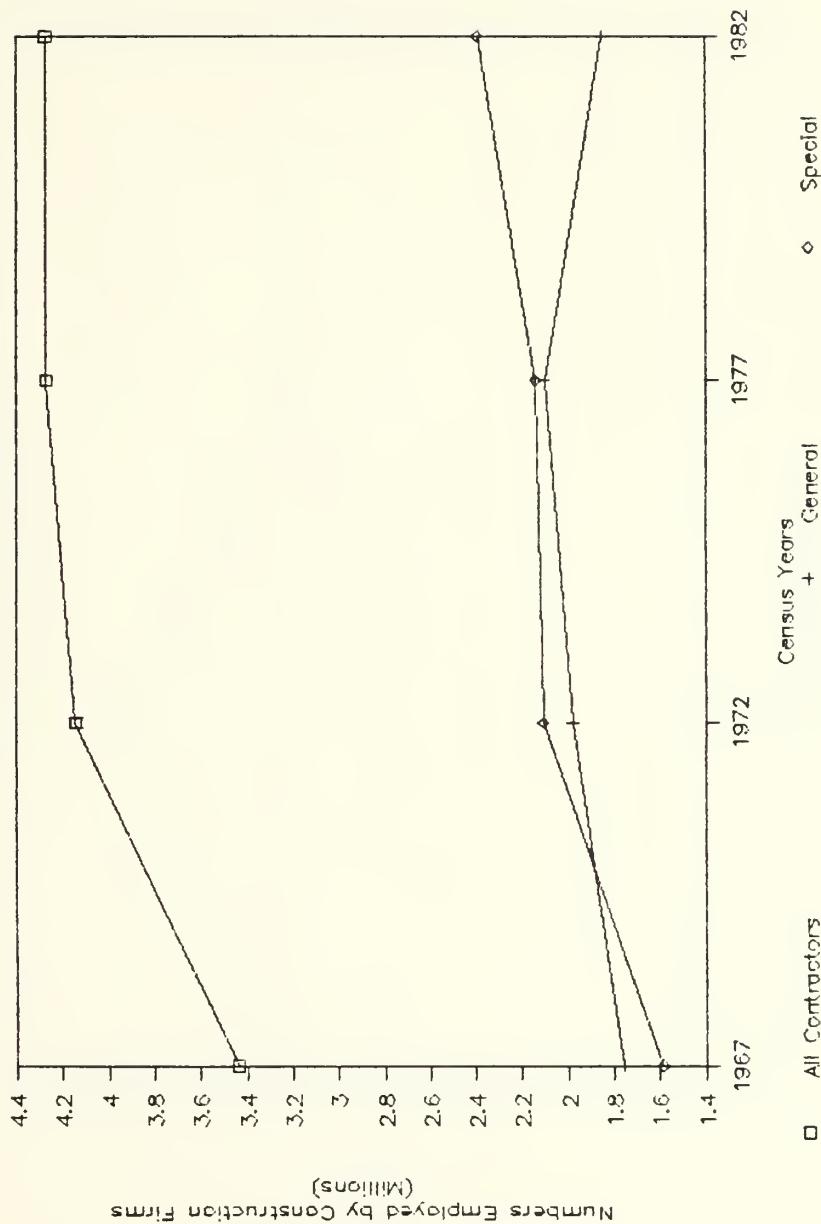


Figure (9.6)



EMPLOYMENT BY SMALL CONTRACTORS  
AS A % OF ALL CONTRACTORS

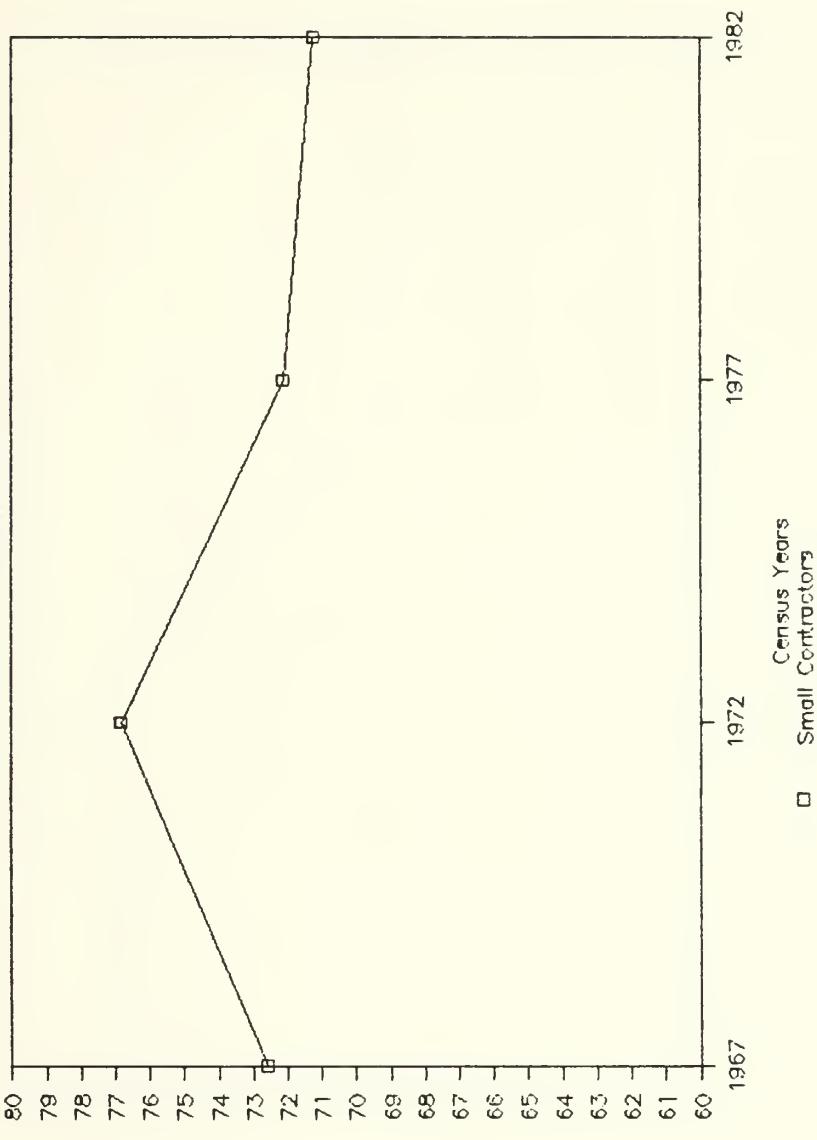


Figure (9.7)



EMPLOYMENT BY SMALL GENERAL CONTRACTORS  
AS A % OF ALL GENERAL CONTRACTORS

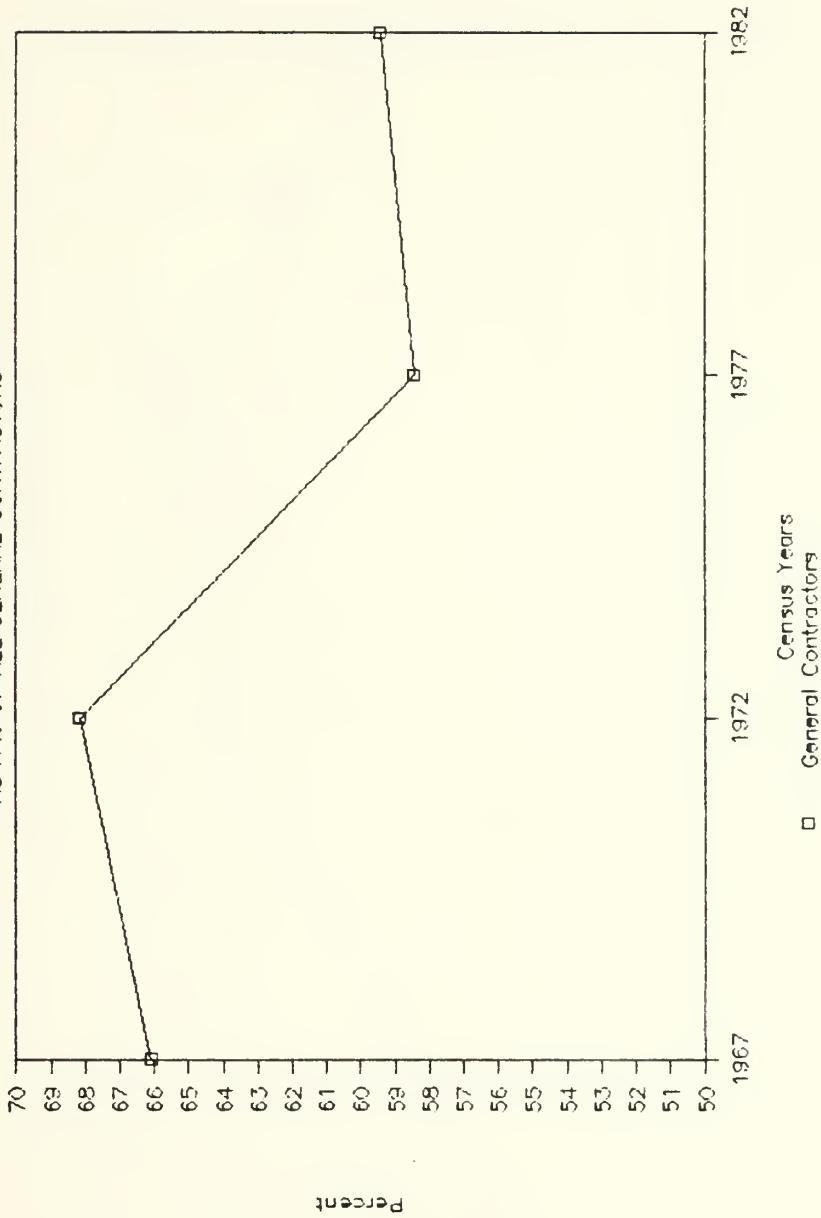


Figure (9.8)



EMPLOYMENT BY SMALL SPECIAL CONTRACTORS  
AS A % OF ALL SPECIAL CONTRACTORS

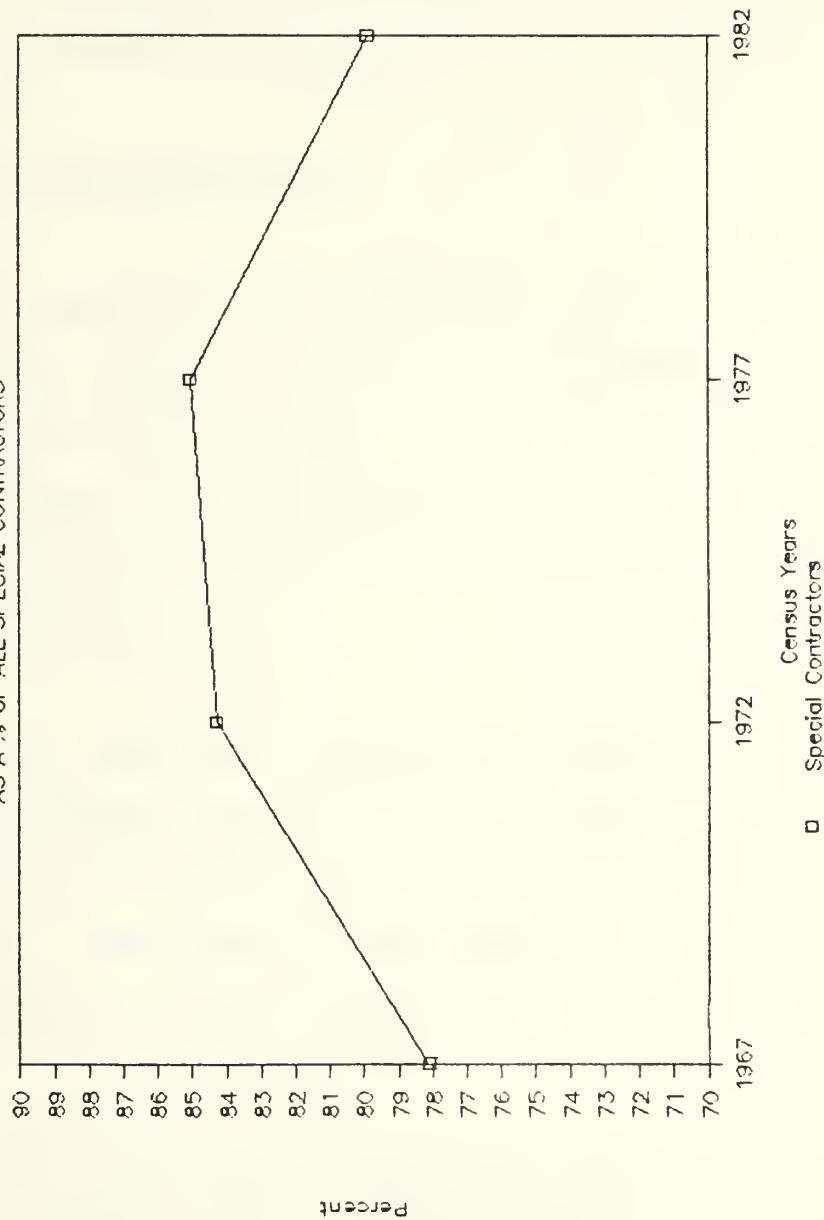


Figure (9.9)



Figure 9.10 illustrates a typical distribution of employment within the construction industry. This figure was also derived from the census data for 1972. Please note, that although the small business share of employment has decreased, it typically is well in excess of 95% of the industry's employment. This is further illustrated by the additional statistics presented in Appendix C.

#### Construction Business Starts

As with several of the areas which the author planned to make detailed analysis, the area of construction firm starts has not been well documented. After investigating several possible sources for comprehensive business start data, the author was forced to utilize the limited data available from Dun and Bradstreet<sup>1</sup>.

Dun and Bradstreet Corporation publishes a periodic summary of business starts for all of the two, and 3 digit, SIC codes utilized by the SBA in making size determinations. The business starts data includes new firms, but not changes in legal status, name, location or ownership changes of

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1. The author investigated using data from the court system and IRS tax records. For a number of reasons including cost, excessive research time and limited value of the data, both sources were eliminated from consideration.



existing firms. For this reason, the Dun and Bradstreet data is superior to that available from the other sources examined. Unfortunately, D&B did not start publishing the **Business Start Record**, until 1985.

The limited data available from D&B is presented graphically in Figure 9.11. The graph shows that construction business starts have experienced a constant decline over the three years presented. Dun and Bradstreet attributes this decline to three factors. The first year the business start report was published, was toward the latter stages of a "robust" recession recovery period, consequently, a number of entrepreneurs had already entered the industry. Secondly, in 1986, pending tax reform legislation, discouraged many individuals from starting new businesses. Lastly, the poor economic conditions in the oil producing regions "resulted in weakness in entrepreneurial activity...(Dun and Bradstreet, 1988)" The limited period over which this data is available renders it worthless for the purpose of investigating long term SBA policy impacts.



% EMPLOYMENT BY SMALL CONTRACTORS  
AS A % OF ALL CONTRACTORS

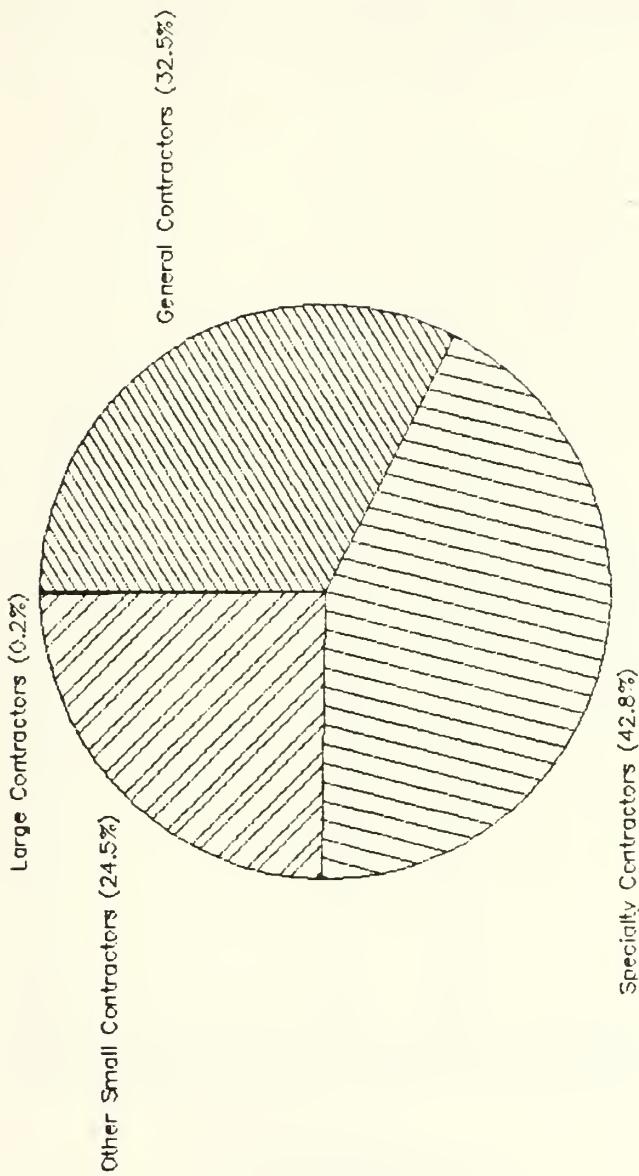


Figure (9.10)



## CONSTRUCTION BUSINESS STARTS

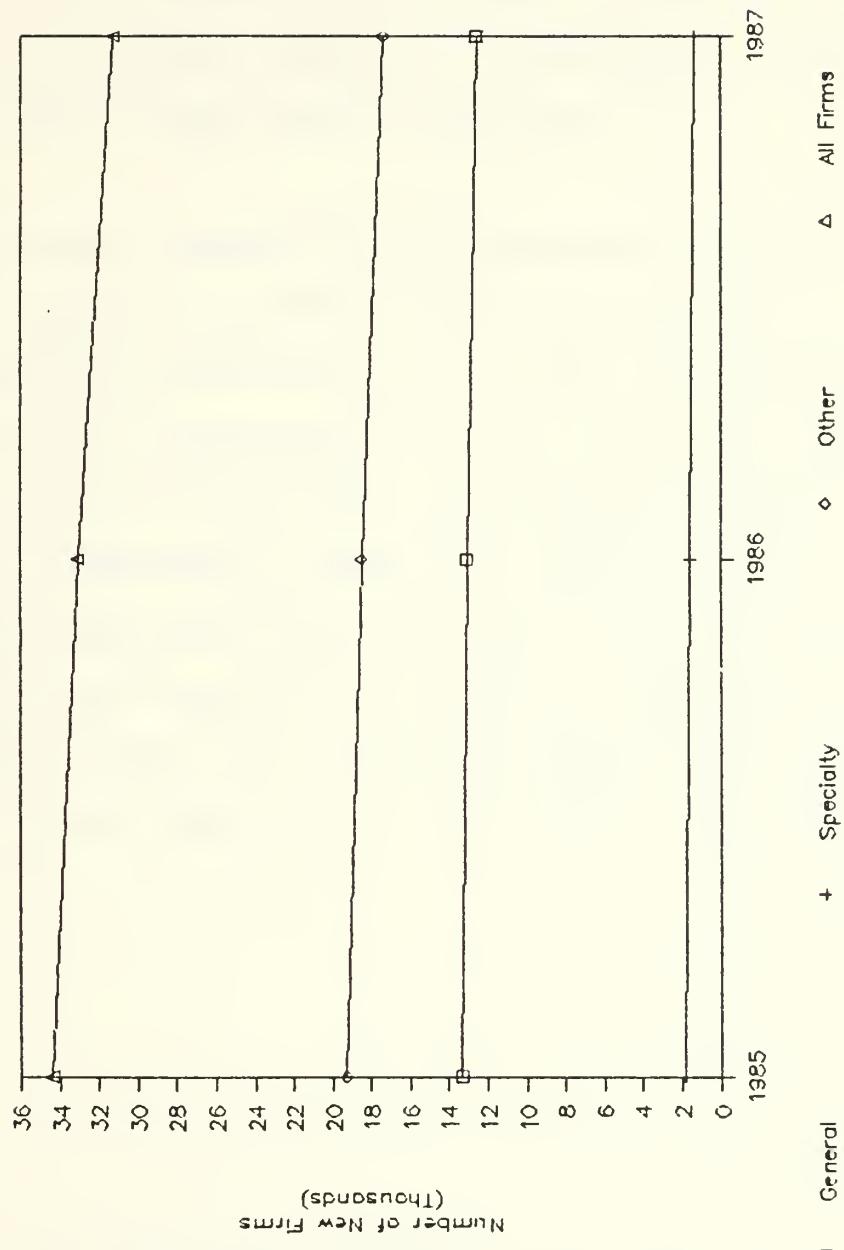


Figure (9.11)



## Business Failures

The Dun and Bradstreet Corporation has maintained business failure records since 1920<sup>1</sup>. Business failure data, like the business starts data, includes a majority of the SIC codes used by the SBA. Extensive, comprehensive, construction industry data was thus readily available.

Construction industry failures presented in Figures 9.12, and 9.13, provide a breakdown of the data by contractor type. Two interesting observations can be made from these graphs: A sharp peak in construction failures occurred in 1975. A similar, but much more extreme, increase occurred between 1982 and 1985. Additionally, comparing figures 9.13 and 9.11 to figure 9.5, provides further insights. On the average, more than 95% of the construction industry is comprised of small firms, intuitively, one would expect that the same proportion, or more, of the firms started, or failed, were also small business.

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1. Dun and Bradstreet defines a business failure as a business involved in court proceedings or voluntary actions involving losses to creditors. The **Business Failure Record**, therefore, does not include all business discontinuances.



CONSTRUCTION BUSINESS FAILURES  
ALL CONSTRUCTION FIRMS

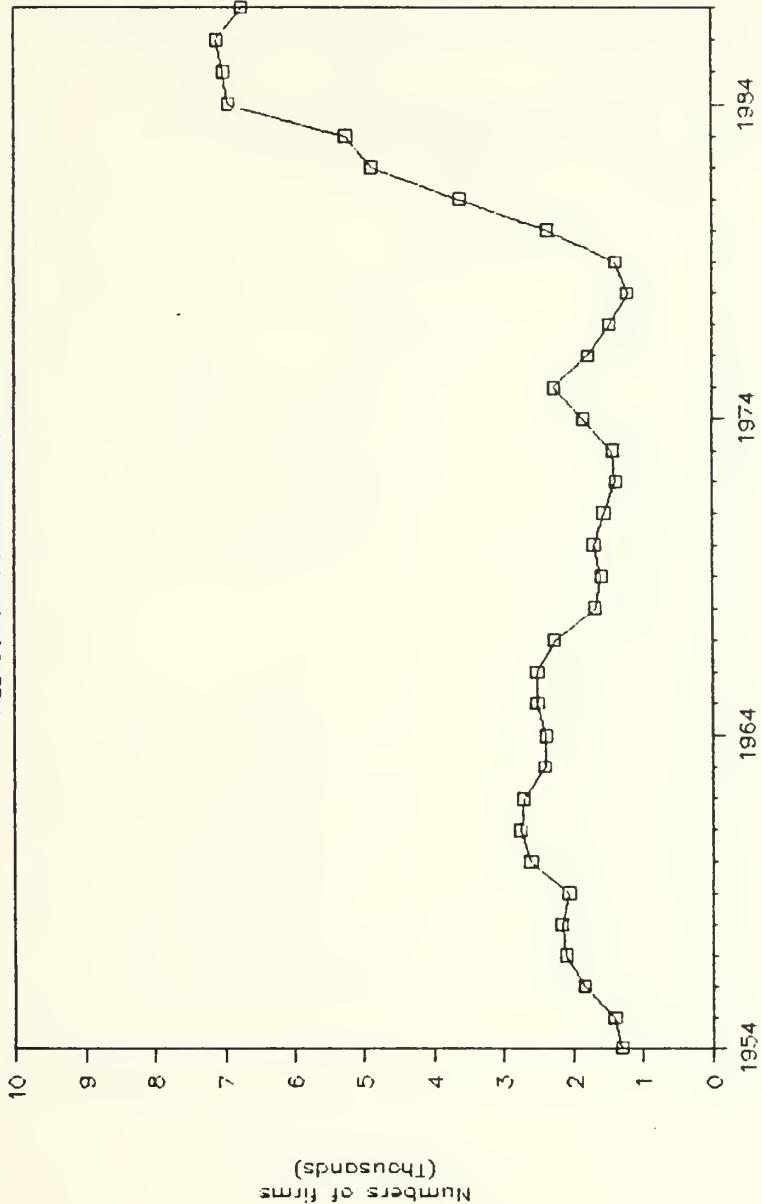


Figure (9.12)



CONSTRUCTION BUSINESS FAILURES  
ALL CONSTRUCTION FIRMS

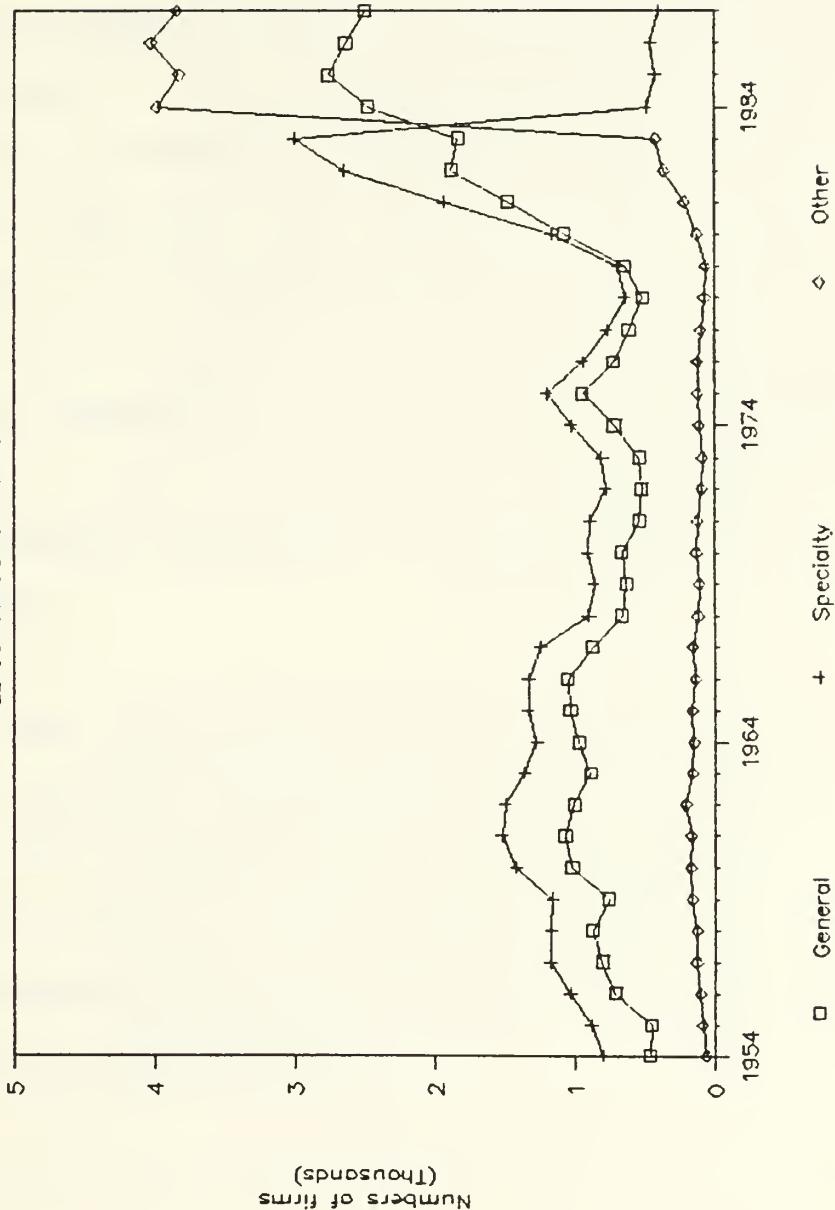


Figure (9.13)



The high rate of failures which occurred between 1982 and 1985 took place at the same time that the country was experiencing a "robust recovery period", following the recession of the late 1970's and early 1980's (Dun and Bradstreet, 1988). The Small Business Administration explains this high rate of business starts and creations, as being a "continuing business trend, common to all industries in the United States". They say that a general rise in new businesses has occurred continuously since 1967. "As new businesses form and fail faster, relative to existing businesses, it is inevitable that new business growth will result in some increase in business failures." They also credit this phenomenon to "a structural shift toward self-employment," with the "traditional risks associated with entrepreneurship" resulting in increased business failures (SBA, 1984).

The 1975 failure peak roughly corresponds to the first major oil shortage experienced by the United States, which began in 1973 (Faulkner, 1968). This suggests that the rate of business failure is also strongly influenced by the state of the national economy, with little influence applied by the Small Business Administration.



The Small Business Administration estimates that 40% of all existing small firms do not rely on any of the commonly used financing sources, over 60% do not even rely on individual savings accounts (SBA, 1988). This then, leaves only the SBA business management programs for influencing the business failure statistics.

The following chapter will show that the management programs have not been utilized sufficiently to apply any influence on the U. S. economy.

### The Fair Share

The legislation which created the Small Business Administration speaks of ensuring small business receives its "fair share" of the Federal Procurement Dollar. Nowhere in that legislation is, "fair share", defined. In dealing with the SBA and other procurement personnel it soon becomes obvious what the "fair share" referred to is. Most references to the "fair share" mean, an amount of contract dollars awarded to small business, equal to the ratio of the number of small businesses divided by the number of large businesses. The goal to provide small business their fair share, is then, very subjective and difficult to determine conclusively.



Table 9.1 provides a listing of individually reported Federal procurement actions, awarded to small businesses between 1979 and 1985<sup>1</sup>. In 1985, Construction comprised approximately 6% of the awards received by small business, which is only sixty percent of the construction dollars awarded that year (SBA, 1987). Sixty percent is relatively small when one considers that the construction industry is dominated by small business.

One study commissioned by the SBA in 1986 found that "the fact that small firm procurement is disproportionately low does not, however, establish evidence that an inequitable situation exists...Federal government procurement may be concentrated in industries which are dominated by large business (Faucett, 1986)." This same study found that after combining the individually reported contract actions, estimated subcontract actions, and awards below the reporting threshold, small construction firms still only received roughly fifty five percent of the Procurement weighted share of Federal construction dollars<sup>2</sup>. Of more interest, is the

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1. Prior to 1983 contract actions in excess of \$10,000 were reported, after that date the report threshold was increased to \$25,000.

2. The investigators merged the data contained in the FPDS and SBDB to obtain a more accurate estimate of the contract share awarded to small business. The procurement within each Standard Industrial Classification (SIC) were then weighted by the amount of procurement from that SIC. The values were weighted because the Federal government doesn't have the same



investigators' finding, that roughly 50% of the awards made to small business were through the Set-Aside program (Table 9.2).

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procurement mix as the private sector.



INDIVIDUALLY REPORTED CONTRACT ACTIONS  
1979-1985

Fiscal Year	Total (Billions of Dollars)	Small Business	Small Business Share (Percent)
1985	182.6	25.2	13.8
1984	167.7	25.4	15.2
1983	155.4	22.0	14.1
1982	152.3	23.5	15.4
1981	128.6	19.8	15.4
1980	100.8	15.3	15.2
1979	88.2	14.0	15.8

Note: Reproduced from **The State of Small Business: A Report of the President** (1987) with dollar figures rounded to the nearest \$100 million.

Table (9.1)



CONSTRUCTION  
 PROCUREMENT SHARE  
 VS.  
 INDUSTRY SHARE

Year	Small Business Share (%)			
	Sales (Weighted Procurement)	Procurement	Total	W/O Set-Asides
1981	54.56	47.61	21.86	
1982	55.14	52.39	19.66	
1983	56.18	52.17	17.29	

Table 9.2



CHAPTER 10  
PROGRAM ANALYSIS

Background

Chapter 8 provided some discussion of the limited data available to the Small Business Administration and other researchers. For the reasons discussed in that chapter, it is not possible to provide a detailed analysis of each of the programs managed or associated with the SBA.

As the author conducted the research for this paper, he learned of many programs he was not aware of. The fact that he did not know of these programs made him question how many small business owners were also uninformed. A construction business survey was conducted to establish how many owners, or managers, knew about the SBA programs, and who took advantage of them. The results of the survey will be presented followed by a discussion of the Small and Disadvantaged Business (8(a)), and Title II programs. These two programs make up the remaining segment of SBA construction involvement, not already analyzed.



## SBA Program Awareness

After questioning my own knowledge about the extent of the Small Business Administration's assistance programs, I began questioning friends and relatives. I found that a majority of the persons questioned had little or no idea what the role of the SBA is. This naturally led me to question the awareness of the business management and loan programs, among construction business owners and managers.

Beginning in late April 1988, a business questionnaire was developed which addressed most of the major SBA programs (Appendix D). Questions were divided in to three sections. The first section, was to establish the probable size category in which the SBA would place the firm. Section two asked specific questions about past management experience or business ownership. This was to try and see how many of the managers had been in business, had succeeded or failed, and whether SBA assistance was utilized by that firm. The questions in part three, were designed to be answered as yes or no, and were intended to give an indication as to whether the respondent was aware that a specific program existed<sup>1</sup>.

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1. Program awareness was limited to a basic knowledge that such a program existed, but not necessarily a detailed knowledge of its workings or qualification requirements.



The survey was conducted in two phases because of a poor response from the first attempt. The first phase, was a mailing of 100 questionnaires to small construction firms doing in the Atlanta, Georgia area. The names of the firms were obtained from the Atlanta Builders Exchange or from the Associated General Contractors (AGC) roster. Phase one received only 54 responses, of which 18 were classified as large business and eliminated from the analysis. Phase Two of the survey was conducted by telephone in late May and early June 1988. This survey of an additional 100 firms, resulted in 65 responses with 14 being discarded.

From both phases of the survey, a total of 69 small business responses were received, of which 6 were specialty contractors. 34% of the respondents presently perform government contracts but only 8.7% of the respondent's firms have used any form of government assistance.

The SBA programs that exhibited the greatest degree of public awareness, are the guarantee loans and bonding programs, in which 60% of the respondents were aware of the programs. It is interesting to note that the highest participation by the respondents was in the bonding and management publication programs, and the loan program had no participants among the surveyed firms.



Awareness of the Title II program and 8(a) program was 56% and 59% respectively, followed by the management training programs, at 30% to 40%. One of the survey respondents admitted to having substantial management and financial difficulty. This firm had received Federal contracts in the past, but could no longer get a bond. Further, he admitted that he was on the brink of bankruptcy, yet was unaware of any assistance available through the SBA<sup>1</sup>.

The overall participation rate of 8.7% for the small construction businesses surveyed, is the basis for the opinion, expressed in the last chapter, that the SBA has little influence in the nations economy or the construction industry.

The statistical accuracy of this survey can be questioned, especially if the results are extrapolated to the national level as I have done. However, the results presented are within reasonable agreement with results obtained by the SBA on similar studies. A few of these studies will be discussed in the following sections.

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1. It is also interesting that one of the large firms that responded to the survey admitted to having used a minority owned company to act as a front for receiving 8(a) contracts.



## 8(a) Program Participation and Cost

None of the respondents to the business survey were small disadvantaged businesses (8(a) contractors). At first the author thought it was due to survey error. It has since been surmised to be the result of a scarcity of 8(a) contractors.

In the Atlanta, Georgia area, the combined 8(a) participation for all industries is only 94 firms.

Since the start of the 8(a) program in 1968, only 4598 firms across the country have participated in the 8(a) program. As of October 1987 only 1,287 firms have graduated to self sufficiency (Luke, 1988). The bulk of 8(a) firms are located in the Philadelphia and San Francisco areas. It is interesting to note; in the bidding analysis, presented later in this chapter, none of the 8(a) bidders received awards, even though the data included Navy Construction in the Philadelphia area. Failure to award contracts to the 8(a) firms resulted in insufficient data to analyze the 8(a) contract cost growth.

In a survey of contracting officers, the General Accounting Office (GAO) found that 36 percent of the 8(a) contracts are more costly to the government, while only 9% of the non-8(a) contracts are more costly. In the same survey, the GAO found that nearly half of the contracts awarded to



8(a) contractors required substantially more administrative monitoring (Luke, 1988). In the same report over 35% of the 8(a) dollars awarded in 1987, went to 50 firms while over 1,225 firms received no contracts at all.

The administrative cost of 8(a) contracts has been alluded to as being higher than competitively awarded contracts, the lead time for award is also excessive. The GAO in a 1982 investigation, found that average time to award an 8(a) contract was roughly 95 days, while competitive contracts were well under 100 days (GAO, 1982). The GAO also found direct costs for 8(a) contracts to be excessive.

"from the procurement activity's standpoint, the pricing of 8(a) contracts is unique. Rather than determining a fair and reasonable price...contracting officers are expected to determine a "competitive market price, based on what they would expect to pay viable competitive firms (GAO, 1982)."

In addition, it was found that contracting officer were expected to add up to 20% on fair market prices to cover contractor inefficiency, with the difference in price to be refunded by the SBA<sup>1</sup> (GAO, 1982). You will recall, in

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1. In 1972 the SBA received \$8 million to start a Business Development Fund (BDE). The fund was to be used for paying the differential between negotiated 8(a) contract prices and fair market price. Until this time, contracting agencies facing fiscal limitations were reluctant to award 8(a) contracts, because the higher costs would be funded from the



chapter 5 the existence of an apparent conflict of interest in the 8(a) negotiation procedures was discussed. This conflict was also recognized by the GAO. The GAO found the SBA's Standard Operating Procedure (SOP) 80-05 instructs:

"The purpose of the negotiations...is to negotiate the terms and conditions of the proposed subcontract and agree upon a price which will permit the 8(a) concern to perform and earn a reasonable profit. It may be assumed that the representatives of the contracting officer...will need to limit the contract price to the amount they consider to be the "fair market price" or less. If the price proposed...is not considered sufficient to assure a reasonable profit...the SBA contract negotiator...will conduct further negotiations for the purpose of obtaining agreement to the higher price (GAO, 1982)"

The affect this SOP has on the contract costs will become evident in the following paragraphs.

#### 8(a) Contract Bidding and Growth

Appendix E provides a printout of the Small Business Award Data base obtained from the Northern Division, Naval Facilities Engineering Command, Philadelphia, PA. (NORTHDIV). NORTHDIV is the Navy's regional facilities managers and construction administrators, responsible for all Navy facilities in the Northeastern and Northern Mid-West of

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agency budget. In 1982, the BDE fund was increased to \$20 million.



country. This data base was used to analyze the bidding record of firms doing business with the Navy. The data base contains approximately 1800 individual bids on over 450 contracts ranging in value from \$10,000 to \$15 million. Although the data base was intended to keep track of only Title II and 8(a) contracts, some large businesses submitted bids, thus, allowing direct comparison between large and small business bidding.

Prior to doing any analysis on the data base, the size status of each firm was confirmed, or else discarded from consideration. After this process was complete,<sup>20</sup> contracts with 33 bids from 8(a) contractors remained. The bids were then compared to the government estimate<sup>1</sup>. It was found that the bids submitted by 8(a) contractors averaged 75% (1.75 times the estimate) above the government estimate, with a variance of 94.7%. Awards to the 8(a) firms averaged, only 8.08% above the government estimate, however, the government estimate was probably adjusted upward by 10%, in accordance with the Federal Acquisition Regulations discussed in chapter

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1. The government estimate was chosen as a benchmark for comparison of the bids, and awards, in order to maintain a relatively constant datum. It is assumed that the government estimates are made by a relatively small number of engineers and the effects of any skewed estimates will be minimized through the Central Limit Theorem.



5<sup>1</sup>.

The SBA, in 1983, commissioned an investigation of contract growth. This study found, overall, negotiated non-competitive contracts awarded to small business, grew an average of 64% during the life of the contract. Construction contracts awarded on a non-competitive basis grew by only 20%, the smallest increase of all the industries studied (SBA, 1984).

#### Title II Contracts

An identical analysis was conducted for contracts awarded to large businesses, and small businesses participating in the Small Business Set-Aside program. The study showed that on the average, Federal Contracts were awarded more frequently to Title II firms when they were formally advertised as firm fixed price contracts. The SBA attributes this to favoritism toward the large contractors, principally due to reduced

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1. Informal discussions with present and former Navy contracting officers, indicate that it is a common practice to add the 10% "reasonable price threshold" allowed by FAR 19.806-2.



administrative burdens. The study also found,

"When contracts are classified by their original sizes in FY 1982 dollars, the frequency of modification increases with contract size. The same is true of growth in contract value with two exceptions: contracts that started off between \$1 million and \$5 million in FY 1982 dollars grew a bit more than larger contracts and, more notably, the contracts showing the greatest percentage growth were the ones that started off between \$10,000 and \$25,000 (SBA, 1984)<sup>1</sup>."

These findings agree very favorably with those of the authors limited study.

#### Title II Contract Bidding and Growth

A bidding study identical to the 8(a) study performed on the NORTHDIV small business award data base, was conducted for Title II and large contractors. For Title II Contracts, the average bid exceeded the government estimate by 25.7% with a variance of 70.3, based on a population of 413 bids on 104 individual contracts. The result for large business, was an average of 6.23% over the government estimates with a variance of 38.8. The award prices for Title II contracts averaged +6.8% above the government estimate, while large business awards were -16.1% below the estimate. The variances for

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1. This is even more alarming when one considers that the data did not include contracts less than \$10,000.



these averages were 33.85 and 25.6 respectively.

The study of Title II and Large Business contract costs was taken one step further. Another data base was provided by NORTHDIV, that included all of the contracts over \$10,000, awarded since 1981 and completed as of 30 June 1988. This data base was cross checked with the small business award data base used in the previous analysis. The cross check was done to separate contracts awarded to 8(a) firms from Title II and Large contractors<sup>1</sup>. From this data base, the contract growth rate for the Title II contracts and large business contracts was calculated. Appendix F provides a copy of the data base and summary calculations of contract growth.

For Title II contracts it was calculated that an average of 4.4 changes are negotiated during the life of the contract, while large contractors average 14 changes per contract. The variance for this analysis is 5.1 and 4.4 respectively. The change in contract value increased an average of 2.29% of the bid price, for Title II Contracts, and large contractors increased the contract value by 6.86%. The average cost of the large firm's contract was \$3.6 million while that of the small contractor was \$885,000. Large contractors had more changes per contract, and the average values was also much

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1. Insufficient numbers of 8(a) contracts were available to do any further statistical analysis.



higher. The large contractors changes averaged \$17,150 and those of the small contractors averaged \$4,606.

For the most part, the figures presented above agree with those obtained by the SBA in their 1983 study. They found that competitively bid contracts averaged 4 changes per contract, and the contracts experienced a larger growth rate, and number of changes, as the cost of the contract increased. The study found, however, that the rate of growth was substantially higher than those recorded in this study; (20% and 49%) for small and large contractors respectively (SBA, 1984). The difference is undoubtedly due to the method of calculation and extent of the study<sup>1</sup>.

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1. The SBA study conducted over a three year period, incorporated a majority of the largest Federal contracting agencies. All of the contract costs were converted to constant 1982 dollars. A large number of contracts were eliminated from consideration for reasons too numerous to list. The eliminated contracts accounted for over 44% of the Federal contract actions during the period of study.



CHAPTER 11  
CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The Small Business Administration was established in the early 1950's to provide a means for minimizing the unfair advantage large, established firms, had in the market place. Early programs were designed to assist businesses to become more competitive and hence, ensure the government received quality goods at a fair price. The early programs also attempted to ensure no one firm was able to command the market place, thereby, being given the opportunity to control prices and supply.

As time progressed the SBA's programs were diverted more toward social and economic equality, than business assistance. In an attempt to achieve social equality the focus of the SBA programs changed from small business versus large business, to one of "fair share." The goal now is to provide each social and economic group, within the small business community, its "fair share" of the Federal dollar.

The largest, socially targeted program, is the Small and Disadvantaged Business (8(a)) program. The 8(a) program is aimed toward assisting minority owned businesses to become



self sufficient through a process of management training and the award of non-competitive government subcontracts. A number of studies have concluded that this program results in increased contract costs with minimal benefits. Bid costs have been estimated as high as 30% above competitive contract costs, with growth rates estimated at an additional 20% (SBA, 1984). Many participating contractors, view this program as an end unto itself, with little interest in developing into a self sufficient firm. The program, through poor management and poorly defined guidelines, limits its assistance to a very small portion of the enrolled eligible firms. In spite of its limitations, the 8(a) program has assisted some 1,287 firms to become viable, competitive businesses in the first 20 years of operation. (Luke, 1988).

The effectiveness of this program was best summed up by the GAO in its 1981 report,

"The program has done too much for too few for too long (GAO, 1981)"

Unlike the 8(a) program, the Small Business Set-Aside program appears to be essential to the well-being of the nation. It is difficult to say, to what extent the Title II program has assisted the nations economy, or fostered the creation of new businesses. The SBA did conduct a cost



benefit study of the program in 1969, and concluded the benefits exceeded the cost by a ratio of 9.5 to 1 (Bothmer, 1973). Based on the arguments and analysis presented in this paper, it is obvious that the construction industry has benefitted.

The previous chapter indicated the differential in bid prices, between large and small contractors, was 19.4% (25.7%-6.3%) of the government estimate. It was also shown that large contractors tend to have contract growth in excess of 49% of the original bid amount (SBA estimate). Without the bidding restrictions imposed by the Title II program, large contractors would be almost assured of receiving the contracts they want, without even changing bidding strategy or profit margins. Once the contract is awarded, the owner would suffer through significantly higher cost growth. The predominant small contractor would suffer significantly and eventually go out of business.

The overall, direct impact the SBA programs have had on the construction industry is relatively slight. Too few firms participate in Federal procurement to make a significant impact on social or economic conditions across the country. The Federal government does provide a significant dollar amount to the construction industry each year, well over 50% of which goes to small businesses. However, the construction



industry is predominantly small business, so limiting bids to small firms has not significantly reduced competition. What it has done is reduced cut throat competition by large firms.

The SBA was established with the intention of distributing Federal procurement dollars to small businesses in proportion to their share of the industry. The method employed by the government has attempted to distribute procurement dollars in proportion to the small business/large business ratio which exists in the private sector. The same ratio does not exist among the firms participating in government procurement. As a result, rather than distributing the procurement dollars to a fair share of the industry, a high percentage of federal procurement money goes to a relatively small segment of the small business community. Once again, the government is leaning toward, "doing too much for too few."

The number of firms utilizing the remaining SBA programs (bonding, loans, management assistance etc) is insignificant. Although the business survey results indicated that a few firms had utilized the bonding program during the early years of their business life, the overall participation was only 8.7% of the firms surveyed. The likelihood of these programs making a significant impact on the construction industry is remote.



## Recommendations

With the number of valuable SBA and SCORE resources available to the small business owner, it is unfortunate that they are not more fully utilized. It is especially distressing to think that the SCORE volunteers can provide years of experience free of charge, and yet, businesses fail to take advantage of it. It is shameful that the small business owners have the potential resources of every major university and government research facility at their disposal, and yet it is not even realized. Finally, the SBA itself condones charging the government higher than "fair" prices, in order to cover contractor inefficiency. What should be done about the concerns expressed above?

It appeared to the author, the offices of the SBA were far too compartmented to work efficiently. A number of the personnel interviewed for this paper indicated that few, if any, referrals were made between offices within the SBA. I believe partly for this reason, the GAO found that the SBA staffs were overworked and unable to perform basic management training evaluations (GAO, 1982). Had internal SBA referrals been performed, more businesses could have been assisted by SCORE and SBDCs. The author's recommendation to the SBA would be; to strive for more internal communication and referrals



to other offices, including the SCORE counsellors. In fact, it is the author's opinion that SCORE should be the first place that a business owner goes before seeking an SBA loan or other assistance.

The effectiveness of the business management assistance programs, are research programs is hampered by a severe lack of publicity. The potential of these programs is virtually limitless, unfortunately, the public is not aware that they exist. The benefits generated by publicizing these programs would, undoubtedly, far outweigh the costs.

The SBA has the appearance of a conflict of interest in the administration of the 8(a) program. Each SBA office involved in negotiating 8(a) subcontracts or change orders should make a concerted effort to remove the apparent conflict. Such actions could include assigning the negotiation to a team from another office, or simply, ensuring the negotiators are not aware of the government estimate prior to the negotiation. Selecting negotiators unfamiliar with the government estimate would remove some scrutiny of the program, and assist the SBA in evaluating what the "true" market price is.



In conducting the second phase of the construction business survey, the author received many inquiries about the bonding program. It appeared many construction firms were reluctant to award contracts to small firms utilizing SBA backed bonds. The contractors fear the bonds are, "a bond of last resort", and therefore present a higher risk of default. Some concern was expressed that it would be difficult to collect on the bond in the event a contractor failed to perform. The SBA should publicize, perhaps to the contractors on the PASS listing, the facts about SBA backed bonds. Informing prime contractors of the facts could assist a few more struggling firms.

Lastly, the SBA should attempt to establish a system for monitoring its progress in relation to the established SBA goals. Except for contract actions in excess of \$25,000, the SBA has no central data base. Banks providing loans, surety companies providing bonds and research institutes assisting businesses, do not provide the central SBA office any continuing information about their activities. This is not to advocate more bureaucratic paperwork, however, knowing the utilization of the program would be helpful in evaluating the effectiveness and the cost of the SBA.



In summary, the programs sponsored and supported by the SBA have potential to significantly help the small business owner and construction industry. The major programs as they are now organized are far to restrictive to provide a significant impact on new business starts. The management assistance and research programs have significant potential, but are not publicized and therefore are not utilized sufficiently to significantly affect the economy. Lastly, the loan and bonding programs, in the opinion of the author, are well organized and provide an essential service at a reasonable rate; no significant changes are required.

#### Further Research

Further research in this area, at the scope attempted here, would be difficult. Far too few records are kept on the construction industry, and its performance in the Federal and private sectors. Once the construction data base is established and operating at Indiana University, perhaps some of the data gaps will be filled, and the effectiveness and cost of Federal contracts can again be studied.

Two other related areas of interest include: determining the percent of graduated 8(a) contractors who have continued operation and their rate of growth compared to other firms. Secondly, compare the private sector, small business award



ratio, to that of the Federal Government. A study similar to those suggested would give an indication of what would happen in the small business community without government intervention. They would also provide another measure of the SBA program impacts.



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**APPENDIX A**  
**CORRESPONDENCE**



Date: 25 March 1988

From: Alan M. Wironen, LT, CEC, USN  
To: Commander, Southern Division, Naval Facilities Engineering  
Command, Charleston SC  
  
Subj: IMPACTS OF SMALL BUSINESS SET ASIDE CONTRACTS ON THE  
CONSTRUCTION INDUSTRY

1. As part of the masters degree requirements at Georgia Tech, I am researching the impacts that the small business set aside contracts have had on the construction industry. I would like to obtain your assistance and the cooperation of your engineering staff and ROICC personnel during the data collection phase of this project (April and May 1988).
  2. I would like to visit your office to review contract records and compile a database of contract costs and durations. I will be interested in unrestricted and SBA contracts, and some contracts awarded prior to 1978 to be used as a comparison. I may also be interested in talking with your Small and Disadvantaged Business representative.
  3. To make coordination easier, could an individual be assigned as my point of contact? I can be reached at:

NROTC Unit Georgia Inst. of Tech  
225 North Avenue NW  
Atlanta, GA 30332

4. Any assistance you or your staff can provide will be greatly appreciated.

Very Respectfully,

Alan M. Wironen  
LT, CEC, USN



Alan M. Wironen  
1049 Powers Ferry Rd.  
Apt 2600-4  
Marietta, GA  
30067  
17 March 1988

Small Business Administration  
Office of the Administrator  
Washington, DC  
20416

Dear Sir:

To partially fulfill the masters degree requirements at the Georgia Institute of Technology, I am doing research on the problems faced by small construction companies. Several of your annual publications provide statistics on small businesses as a group, however, I have had some trouble finding statistics specifically for small construction firms. Would it be possible to extract the information I need from the data used to calculate your statistics? I am looking for data that relates the failure rate of small construction firms prior to the set aside (8a) legislation, and the present.

The amount of data I require is relatively small. A count of the number of construction firms that failed (using the Dunn and Bradstreet Definition) in the years prior to, and after the legislation. Sufficient years should be looked at to provide about 40 to 50 failures. I will also need the total count of construction firms looked at, whether failed or not, corresponding to the period before and after the legislation. Additionally, if it is available, the number of years the failed firms were in operation prior to failure.

If the information requested is available, but your personnel do not have time to extract it, I can do the work myself if you'll open your records to me.

If your organization does not have the information I've requested could you forward my letter to the appropriate office. I would also appreciate a letter indicating who the point of contact is at that office.

So that I may carry on with my research a preliminary response to this inquiry by 15 April 1988 would be appreciated. I apologize for the short notice.

Sincerely,

Alan M. Wironen



Alan M. Wironen  
1049 Powers Ferry RD.  
Apt. 2600-4  
Marietta, GA 30067  
18 April 1988

Dear Sir:

I am a graduate student at Georgia Tech in the Construction Management program. As part of the Masters Degree requirement, each student must submit a research paper to the faculty. My topic is "Small Business Administration Impacts on the Construction Industry."

I am conducting a survey of the construction firms operating in the Atlanta, Georgia area, as part of the research for my paper. I would appreciate you taking a few minutes to answer the questions on the enclosed survey form, then forward it to me in the attached envelope.

Please feel free to make any clarifying remarks on the form. If you have any questions about my paper, the Small Business Administration construction involvement, or the survey form; please feel free to call me at 951-8098.

All responses to this survey will be kept in confidence. If you would prefer not to include the company name on the survey form, that would be fine, but I would like to have a telephone number in case I have questions about your responses.

Sincerely,

Alan M. Wironen  
Professional Engineer



**APPENDIX B**  
**INTERVIEW SUMMARIES**



CONVERSATION SUMMARY  
WITH MR EUGENE MERRIDAY  
LOANS AND BONDING  
6 JULY 1988

1. The Small Business Investment Companies are administered from Washington, no local administrator.
2. SBIC must be licensed by the SBA to make loans. Provides additional resource for small business to receive equity and venture capital.
3. SBIC is a group of individuals and businesses that provide their own investment capital. SBA then matches their initial money.
4. SBIC loans are for any small business. Promote and foster small business profitably and with minimal losses. Loan criteria is developed by owners of SBIC and SBA application criteria.
5. Section 301(d) is a minority entrepreneur SBIC. Loans limited to minority small businesses.
6. Maximum money provided by SBA to SBIC is a ratio of 10:1, to the money provided by the SBIC founders.
7. SBIC's are for potential higher return businesses requiring higher equity needs and loan funds. More for venture capital and innovative businesses that have a high potential for growth. Two types of loans; equity loans for growth investment or loans that will be repaid.
8. Equity investment cannot exceed more than 49% of the business equity. Therefore cannot be a controlling interest in the company.
9. Who benefits from the SBIC loans since they don't usually provide small loans. Small is defined differently for each program.
10. Surety Bond Program, Small is defined as 3.5 million.
11. Interest rate and terms for SBIC's are usually higher than regular banks and SBA subsidized loans. Not much higher or it would eliminate any desire to get this loan. It is no easier to obtain an SBIC loan than a conventional loan. SBIC is supposed to profit so it will not relax its investment criteria.
12. SBA direct loans can be received from any bank. Being governed by FDIC and FSLIC makes them eligible for SBA backing, if they opt for the backing.



13. Lender has the option to have it backed by SBA or provide the loan himself, without SBA backing (Lender has first option on any loan).

14. To obtain a SBA backed loan, firm must first develop a business plan (With or without the assistance of SCORE). The lender would then either grant the loan, deny it or choose to have it backed by SBA. Borrower has no say in who provides the money.

15. Borrower must meet the banks lending criteria, SBA does not dictate the conditions of the loan. The SBA feels that the bank is in business to make money, they are therefore responsible.

16. If the bank decides to have the loan backed by SBA he must submit the loan guarantee to the SBA. The SBA has certain criteria that a loan cannot be used for:

- a. Speculative construction
- b. Rehab of private property
- c. Repayment of loans
- d. Cannot be a non-profit enterprise
- e. Newspaper or magazine
- f. Floor Plan Financing-Automobile financing
- g. Gambling
- h. Real Property held for resale or investment
- i. Speculation
- j. Lending or investment
- k. Monopoly
- l. Pyramid sales plans
- m. Illegal activity
- n. Individual whose business ownership, management or control, is by an individual who is on parole, probation or pending charges.

17. Loan terms are competitive with the private banks, otherwise Government would be in direct competition with the private banks. Banks would not be willing to lend using SBA backed loans. May loan up to \$500,000.

18. Scrutiny of credit history is the same for SBA backed loans and regular loans. Looks at principals experience, business plan, market for services, personal capital etc.

19. Direct SBA loan is received using the same procedure as standard loans, except the borrower must transfer his business plan to an SBA form, and submit it to the SBA district office. Borrower must be refused in writing by two other banks. Rationale is to eliminate direct competition for private banks. Very limited funds therefore loans are limited to a maximum of \$150,000.

20. Banks may have refused to loan money for any reason without having to be answerable for them. The SBA does have to be answerable, and so will again review the borrowers credit



history. If the risk is reasonable and the borrower is responsible, a loan may be provided. This program provides an additional source for business capital.

21. SBA in reviewing a loan application looks at:

- Business experience
- Formal Education
- Potential Market
- Credit History
- Size of Loan
- Board of Directors
- Management capability
- Business Plan

22. No easier to get a direct SBA loan than any other loan.

23. A Local Area development Company is a group of individuals, partnership, business leaders, local leadership etc, who have grouped together to promote business development in a depressed area. Provide some of their own capital usually with bank participation which is matched 60/40 by SBA.

24. Small Businesses go to the Local development company and apply for a loan. On behalf of that business and with his attendance, the business receives a loan from a local bank, the SBA then matches 40% of the loan.

25. Special Contractor Loans- For contractors who cannot finance their contracts. The SBA will guarantee 100% of a loan provided by a bank. The loan can cover only direct costs of the contract. The term of the loan is the contract period and payments are made after the receipt of the progress payments. Rates are competitive with open market. Banks normally not willing to make similar loans without SBA guarantees, because of performance risks. Again the criteria for making the loan depends on the bank. Primarily for ensuring positive cash flows on the job.

26. If a contractor goes into the red and the loan isn't paid, the SBA has a personal guarantee, so they could put a lean on the owners property.

27. May obtain many similar loans provided the total doesn't exceed \$500,000.

28. No disaster loans unless the President declares the disaster. Includes loans to businesses and private property (houses included).

29. Economic disaster loan is only for businesses who have suffered due to natural disasters.

30. Loans are monitored through the banks, by submitting loan portfolios and monthly reports. No periodic checks are made of the businesses themselves.



31. If business does not pay its loan, the SBA leaves the collection up to the bank. The SBA doesn't get involved until the bank asks for his guarantee. The bank can do this at any time regardless of the status of the loan. In this case the payments are sent to the SBA. Has the advantage of allowing the SBA to service loans up to 500,000.

32. SBA feels that the banks have more experience handling commercial loans and have been in business longer than the SBA so they should be able to handle problem loans.

33. Businesses that go belly up, the bank has two options.

1. They can liquidate the loan themselves or
2. Request the SBA guarantee and let the government liquidate the assets.

34. SBA doesn't provide any direct bonds. The SBA guarantees payment bonds, performance bonds and bid bonds through commercial bonding companies.

35. It is substantially easier to obtain a SBA bond than commercial ones, because commercial bonding companies like to deal with firms with volumes of \$20 mil and net worth and working capital exceeding 40 million. Thus the creation of SBA bond program.

36. SBA uses the same check and underwriting criteria as commercial firms. Except requires 10:1 working capital ratio and same criteria as loan criteria(ie. owner experience etc.). For new companies the SBA looks at the firms plans and potential as well as the applicants experience.

37. Direct correlation between work on hand and working capital, therefore the SBA looks at active jobs and capability to do the work. Even if the working capital is from a bank, the SBA feels that the bank has looked at the capability of the firm.

38. SBA looks carefully at the expertise and experience of the company. ie. An electrical contractor couldn't get a bond for a plumbing contract unless he had hired expertise in plumbing.

39. After first bond is issued, the SBA may or may not review the companies capabilities, if he is applying for similar work of similar size.

40. Default and failure would very negatively affect the ability of a firm to receive a bond. Probably would not receive another bond unless the courts determined that the failure was not the contractors fault.

41. 80% guarantee for all bonds.

42. Failure is resolved by the bonding company with the SBA



providing the Guarantee only after the resolution of the claim.

43. The bonding company applies to the SBA to underwrite the bond. The bonding company agrees to comply with the SBA bond requirements. The cost of the higher risk is spread over all bond premiums

44. Bonds are usually significantly more expensive. \$24/thousand while commercial get \$14/thousand. The SBA receives \$6/thousand directly plus 20% of the surety company portfolio.

45 Sam at a local bonding company confirmed that, the SBA Guarantee bonds go through the same approval procedure and criteria as all other bonds. The SBA bonds are for small business. Commercial bonds require the company to have a high equity/working capital ratio and show a profit over the last 5 years. Since the SBA is guaranteeing that bond, the bonding company can relax these two requirements. The SBA guaranteed bonds do not present a higher risk than those of a regular commercial bonding company.

46. SBA guarantee bonds can only be issued for businesses that do not gross more than 3.5 million per year.

47. Bondability is also based on job increases of no more than 200%.

48. Competency determinations are used only by Federal Government. Based on Technical competency primarily and check that sufficient capital exists for this particular contract.



CONVERSATION SUMMARY  
JAMES C. PARKER  
ATLANTA SBA PROCUREMENT ASSISTANCE  
21 April 1988

1. The SBA charter is to aid, counsel, and assist. The objectives are stated in the SBA act.
2. The DFAR provides laws on how to appropriate and obligate federal funds.
3. In the last 4-5 years there has been more changes to the S.B. Act than since 1959.
4. Position and Title: Deputy Assistant Regional Administrator For Procurement Assistance.
5. Provided a procurement assistant telephone directory instead of an organizational chart of the SBA.
6. National level - Office of Congressional and Legislative Affairs
  - Public Communications
  - Advocacy
  - Inspector General
  - Chief Council
  - Management and Administration
  - Comptroller
  - Information Resources Management
  - Special Programs
  - Business Development
  - Finance and Investment
  - Innovation Research and Technology
  - Procurement Assistance
  - Minority Small Business
  - Capital Ownership
  - Hearing and Appeals
  - International Trade
7. SBA has total authority to determine whether a firm is a small business.
8. Regional level- same as national level except certain programs have district offices (responsible for that state or a portion of that state). They are:
  - Minority Development
  - International Trade
  - Financial Investment
  - Business Development
9. Each office and location works independently until, a problem or specific assistance is required. So essentially each level in



the SBA works on an "interface" basis only.

10. Set aside- SBA is chartered under the law; which allows the SBA to identify contracts for which only small businesses can bid.

11. 8(a) Program is for economically and socially disadvantaged businesses. Once qualified, can be granted contracts.

12. Reviewed the appeals process. No longer set aside program for women owned businesses. They are not considered a minority. SBA does provide assistance for the women owned businesses, but not eligible for set-asides.

13. 8(a) is not considered a set aside. The 8(a) board selects a contractor for a particular contract. It is tending more toward competition but it has not reached that point yet. Contracts offered to the SBA reviewed for use in the 8(a) program. Contractor is chosen by the selection board based on the company portfolio, capability, experience, work in progress, how they have progressed through their business plan, and where they are in the 8(a) program. The SBA attempts to help the contractor progress through the program from 100% 8(a) and set aside contracts, to self marketing and only a little government assistance.

14. The loan program does not mesh with the government set aside programs, in that, it is available to any small business regardless of whether they are bidding on government contracts or not.

15. Contact District Office: Fred Stone or Johnny Jones. Get interface between district and regional office.

16. Business development personnel will provide help in establishing a new business. Margaret Pittman or Jim Hunter 347-3683.

17. Summarized what assistance was available through the SBA.

18. SBA assistance is provided to small contractors for the period that they are a small business. 8(a) program is 5 to 7 years. Graduation from the program is based on achievement and assistance period. When the company enters the program 8(a) they develop a plan which shows where they are now, where they intend to be in 5 years and an outline of how they will get there. This plan includes, \$ figure of where the firm should be income wise, production wise, and plant load. When they become self sustaining, self advertising, and achieve level production, they graduate.



19. Margaret Pittman's job is to take the 8(a) offerings and match them to the company's capabilities. Mr. Hunter takes the matched job, and contractor, and helps to negotiate the contract. He puts together the solicitation package and helps to administer the contract.

20. Non government contractor business development: Henry Pair 347-2441.

21. SBA monitors its effectiveness through PCRs a Procurement Center Representatives. SBA tracks itself by how they are aiding new businesses, giving opportunities to bid, by listing a firm on a source list. They check what % of \$ went to small business as compared to non government, for a particular region or facility.

22. May be able to get statistics on business failures through the 8(a) office, or possibly from the business development office at the district office.

23. Contracts that a set-aside are based on having at least two capable firms that can bid on the contract.



Interview Summary  
Mrs. Margeret Pittman  
8(a) Program  
30 June 1988

1. Position is: Senior business Opportunity Specialist.
2. Become qualified for 8(a) by meeting eligibility requirements contained in Public Law 95-507 (Copy provided), and recent changes to 13 CFR 124 effective Oct 8, 1986.
3. Company must be 51% owned, daily managed, and controlled, by socially and economically disadvantaged. Must have resources adequate for procurement, management, technical assistance, and financial assistance. Must be able to perform under the SIC code for the contract offered, and must be small business.
4. To match contracts and firms, we look for capacity, (financial and bonding), experience (identical similar or related), must have been approved to perform under the SIC for the contract being offered.
5. 8(a) does not eliminate new firms from consideration. Only the Associate Administrator for Minority Small Business, Capital Ownership and Development, has the authority to eliminate a firm from consideration.
6. The Associate Administrator will find a firm ineligible if the owner and principal have had no experience performing in that SIC. This is primarily an evaluation of the firms potential for success. (item#6 on form?)
7. Six Steps in determination of eligibility.
8. Application process is in two stages. First is, what do you do. Second stage is; convincing the SBA that he can conduct and manage the particular business. This comprises the first five steps of eligibility.
9. Stage two is only filled out after the SBA has determined there is a continuing need for firms in that SIC. Contracting Agencies will submit weekly, monthly or quarterly lists of pending contracts.
10. Once determined that a SIC is needed, then stage two looks at the capability of the firm, capacity (bonding and financial), experience, location of work, approved support level.
11. All contractors with this SIC capability are given equal consideration for each job. The contractor is then matched to the items listed in #10 to make a selection for the particular job.



12. 8(a) is only open to minority owned or operated businesses. The award is then given to contractors according to a priority list.
13. Once in the program the firm must develop a business plan. Includes where he plans to be and how to get there.
14. The 8(a) firm is assisted in staying on his plan through the SBA programs and through consultants contracted by SBA to help resolve specific problems.
15. If a contractor has an identifiable problem the SBA will provide assistance in overcoming the problem through contracted consultant services or in house assistance. Provided only for the period of the problem.
16. SBA will not provide continuous assistance to a firm, since the contractor has contracted to perform the work. It would be like SBA paying the contractor for not doing anything. The contractor must also maintain his eligibility status while in the 8(a) program (i.e. remain small and minority owned).
17. The goal is not to develop big business from small ones. If a contractor does not perform in accordance with his business plan, the SBA will provide assistance as necessary, but if he still does not perform, the plan will be revised.
18. Conditions for termination include continued inadequate performance.
19. Contracting agency has the authority to accept or reject a recommended contractor, but the SBA can appeal to the head of the agency. Usually, the contracting officer simply states he wants a different contractor, because the recommended one did not perform adequately on a previous contract.
20. Graduation is simply completing the 6 year assistance program. (7 years if an extension is approved)
21. Completion is when a firm becomes big business, or performs his business plan, and there is no higher target that he wishes to achieve. If there is an additional goal, the contractor may revise his business plan and continue in the program.
22. The program period begins at the time of the first contract award and extends for five years. The contractor may, at the end of the 5 the year, request an extension up to the end of the 7th year.
23. The contractor may perform the contract awarded at the end of the program period and all options on it, but will not receive any additional 8(a) contracts.
24. The contractors are given a heavy load of SBA contracts at



first, and weaned as the assistance period progresses. The first contract is usually a simple one.

26. 8(a) firms are tracked after graduations by the central office.



SUMMARY OF DISCUSSION  
WITH  
KEN DAUGHERTY  
NORTHDIV DEPUTY FOR SMALL BUSINESS  
16 June 1988

1. Provided summary of what is to be studied.
2. Problems Ken sees with topic:  
Each contract has a specified completion date  
No database would be able to provide data that would compare completion dates. Possibly look at liquidated damages.
3. Provided a database of small and large business bid data.
4. Position is: Labor relations specialists and deputy for small business.
5. SBA goals are to promote awards to small and small disadvantaged sectors.
6. SBA doesn't track the number of contractors. It does track the number of contracts and \$. Industry is too easily entered or exited to track contractors.
7. 85% of contracts in construction industry are set aside for small business.
8. It is the exception to advertise as non set-asides, if the contract is under 2 mil dollars. Over \$2 mil, the contracts are reviewed on a case by case basis. If it can reasonably be expected that we will get a fair market value, and more than two bidders are interested, then the contract will be set aside for small business.
9. Contracts not advertised for small business require justifications for not going to small business.
10. Procurement of over \$2 million are hard to get small business to bid on (bid climate), so may allow sole source or unrestricted advertisement.
11. Specialty equipment such as generators that were made by a specific company, with unique parts, are advertised unrestricted or sole source.
12. All non small business advertisements require concurrence of the SA at the regional level.
13. Each buying activity has a procurement center representative (Regional level SA person)



14. Each activity may identify which contracts they want to set aside for 8(a). Based on the number of available contractors, available acquisition, lead time, and complexity of the procurement.

15. Another method of setting aside 8(a) contracts, is through search letters. SA asks for a specific contract for a specific contractor. Pertinent information is compiled by the SA and forwarded to the contract specialists, and contract manager, for their opinion. Some conflicts with other contractors result due to this process.

16. 8(a) participation is for a period of five to six years, or until they become large business.

17. If incapable of operating without SA assistance, the contractor must ask the SA to remain in the program.

18. After graduation, the SA does track businesses that have graduated from the program. (Unable to provide a point of contact.)

19. Has experienced several abuses of the system. Many fraudulent attempts to obtain set asides.



DISCUSSION  
WITH  
B. J. KOEJLER  
PHILADELPHIA PCR  
16 June 1988

1. Nobody keeps track of businesses after graduation from the 8(a) program.
2. The district office will monitor the 8(a) contractors while they are in the program.
3. If a company goes bankrupt while in the 8(a) program, the SBA will do an analysis of why.
4. The SBA is there to keep the company from going belly up. Does not recall any businesses going belly up while in the program, unless they got into legal trouble.
5. Most failures occur within two years due to poor management.
6. No abuses of the Set-Aside program they are aware of since, it is difficult to manipulate the system when several contractors are involved.
7. Contract brokering to large business isn't likely now, since the prime must do 25% and must reveal that he intends to let out some of the work. The subcontracted work must also be accomplished with a small business firm.
8. When the 8(a) program first started, the program left itself wide open to abuses such as front companies. Now with the 50% and 25% rules, the small contractor is the person who will be doing the work, not some other contractor.
9. Figure head companies representing an 8(a) contractor still happen, but it is difficult to prove. More common is the case where a legitimate 8(a) company will front the work for a non 8(a), or large company.
10. Prices of work can be influenced by Davis Bacon wages over a time period.



DISCUSSION  
WITH  
DELORES O'MALLY  
CONTRACT SPECIALIST  
16 June 1988

1. The SBA doesn't provide any assistance to contractors and especially not to those persons administering the contracts.
2. Somebody should define their role and how it relates to our goals.
3. NAVFAC has a better record of giving work to small business than any other agency.
4. The SBA gets involved in debarment because they are assisting the contractors? No, they don't assist the contractors. If they had been involved with the contractors more and provided some assistance, they wouldn't get into trouble.
5. The SBA dictates, without regard to capability, who will get what 8(a) contract. The SBA tends to provide 8(a) contractors with MILCON (larger jobs), rather than match the job to the firm's capability and experience. A better method would be to try to match the 8(a) contractor with a job that meets their capability.
6. The SBA doesn't want to be involved with financially insolvent contractors. The loans the SBA is providing are given to companies that can be underwritten, not to those that need management assistance and money to get back on their feet.



**APPENDIX C**  
**CONSTRUCTION INDUSTRY**  
**COMPOSITION**



**3. COMPOSITION OF SMALL CONTRACTORS**

From U.S. Census data and size standard of \$25 and \$8.5 million, which roughly correspond to the SIC size standard for small contractors.

NOTE: Individual data does not add up to the total due to rounding in the census bureau data.

	1967	1970	1977	1980
* General Contractors	24.55	26.17	29.10	32.52
* Specialty Contractors	59.56	50.90	59.49	64.51
* Other Small Contractor	1.81	0.71	1.12	1.08
* Large Contractors	2.55	2.18	1.27	1.28
Total Small Contractors	97.49	97.81	99.79	100.71

\* Others include operative builders and developers

**4. EMPLOYMENT BY SMALL CONTRACTORS**

From U.S. Census data and size standard of \$25 and \$8.5 million, which roughly correspond to the SIC size standard for small contractors.

NOTE: Individual data does not add up to the total due to rounding in the census bureau data.

	1967	1970	1977	1980
* General Contractors	83.73	82.46	129.69	25.66
* Specialty Contractors	35.06	42.80	42.50	47.54
* Other Small Contractor	29.90	24.46	28.52	29.41
* Large Contractors	0.17	0.23	0.28	0.28
Total Small Contractors	99.79	99.77	99.72	99.71

\* Others include operative builders and developers



#### CHANGE IN NUMBER OF SMALL FIRMS

From U. S. Census data and size standard of  
\$17 million, which roughly corresponds to the SIC  
size standard for small general contractors

	1967	1970	1977	1980
All General Contractors	129044	161045	187266	191367
Large General Contractor	1639	1614	4308	2359
Small General Contractor	127405	159421	182958	149898
% Small General Contract	91.72	93.95	92.70	99.71

#### CHANGE IN EMPLOYMENT BY SMALL FIRMS

From U. S. Census data and size standard of  
\$17 million, which roughly corresponds to the SIC  
size standard for small general contractors

	1967	1970	1977	1980
All General Contractors	1156062	1378266	2065320	1645784
Large General Contractor	588487	629711	871501	743970
Small General Contractor	1150625	1367155	1225819	1089324
% Small General Contract	66.09	68.76	69.44	69.40

#### CHANGE IN EMPLOYMENT BY SMALL SPECIALTY CONTRACTORS

From U. S. Census data and size standard of  
\$9.5 million, which roughly corresponds to the SIC  
size standard for small specialty contractors

	1967	1970	1977	1980
All Special Contractors	1915060	2166583	2166220	2089190
Large Special Contractor	246781	2611673	219771	480910
Small Special Contractor	1888279	1774910	1916257	1809210
% Small Special Contract	78.70	81.27	85.40	78.67



**CHANGE IN NUMBER OF SMALL SPECIALTY CONTRACTORS**

From U. S. Census data and size standard of  
\$9.5 million, which roughly corresponds to the SIC  
size standard for small special contractors

	1967	1970	1977	1980
All Special Contractors	221,089	259,992	267,670	238,409
Large Special Contractor	86,641	107,741	108,556	98,465
Small Special Contractor	134,455	152,251	159,114	139,944
% Small Special Contract	59.84	59.15	59.27	59.82

**CHANGE IN NUMBER OF SMALL CONTRACTORS**

From U. S. Census data and size standard of  
\$25 and \$9.5 million, which roughly correspond to the SIC  
size standard for small contractors

	1967	1970	1977	1980
All Contractors	368,771	437,941	490,714	456,737
Large Contractors	98,000	120,001	132,002	118,005
Small Contractors	270,771	317,940	358,712	338,732
% Small Contractors	59.59	59.83	59.67	59.70

**CHANGE IN EMPLOYMENT BY SMALL CONTRACTORS**

From U. S. Census data and size standard of  
\$25 and \$9.5 million, which roughly correspond to the SIC  
size standard for small contractors

	1967	1970	1977	1980
All Contractors	843,6263	1,145,779	1,272,669	1,279,070
Large Contractors	94,189	95,190	118,1572	122,9773
Small Contractors	749,4376	1,048,589	1,154,5127	1,156,097
% Small Contractors	70.86	76.82	72.11	71.03



**APPENDIX D**  
**CONSTRUCTION BUSINESS**  
**SURVEY SUMMARY**



CONSTRUCTION SURVEY  
RESULTS

- April 1988 initial survey of 100 mailed questionnaires:
  - 56 Responses received
    - 14 Classified as large general contractors
    - 4 Classified as Large specialty contractors
- May 1988 and June 1988 telephone survey conducted with 100 firms contacted.
  - 45 Responses received
    - 8 Classified as large general contractors
    - 6 Classified as large specialty contractors
- Total responses by small contractors 69
  - 63 General contractors
  - 6 Specialty contractors
- All contractors were listed on the Atlanta Builders Exchange membership list or the Atlanta AGC listing.
- Survey results show that none of the firms were publicly held companies.

<u>QUESTIONS (Numbers correspond to the survey form questions)</u>	<u>NUMBER OF YES RESPONSES</u>	<u>AVERAGE %</u>
6. Are you a minority owned firm?	0	0.0
7. Do you work on Federal Contracts?	24	34.7
8. Have you owned or managed another firm?	21	30.4
8a. Is the firm still in business?	12	17.4
9. Does your present firm use Federal Government assistance?	6	8.7
10. Where you aware that the Small Business Administration provided the following? Has your firm used it?		
a. Guarantee loans	40 /0	60.0/0.0
b. Management Training ...		
Seminars	27 /3	39.1/4.3
Lectures	28 /3	40.5/4.3
Classroom	27 /3	39.1/4.3
Publications	21 /6	30.4/8.6
c. Management assistance and organization	21 /0	30.4/0.0
d. Small Business Set-Asides	39 /0	56.5/0.0
e. 8(a) Contracts	41 /0	59.4/0.0
f. Dispute Settlement	18 /1	26.1/1.4
g. Bonding	40 /6	60.0/8.6



## BUSINESS ASSISTANCE QUESTIONNAIRE

1. NAME OF ORGANIZATION:
2. NUMBER OF EMPLOYEES:
3. GROSS EXCEED 17 MILLION:      yes      no  
GROSS EXCEED 7 MILLION:      yes      no
4. HOW OLD IS YOUR FIRM:
5. WHAT TYPE OF CONTRACTOR ARE YOU (GENERAL, SPECIALTY):
  - a. ARE YOU A PRIVATE FIRM:      public      private
6. ARE YOU A MINORITY OWNED COMPANY:      yes      no
7. DO YOU WORK ON FEDERAL GOVERNMENT CONTRACTS:
8. HAVE YOU OWNED OR MANAGED ANY OTHER FIRMS:      yes      no
  - a. ARE THESE FIRMS STILL IN BUSINESS:      yes      no
  - b. ARE THE FIRMS PUBLIC OR PRIVATELY HELD:      public      private
  - c. NAME AND ADDRESS OF THE FIRMS:
  - d. AGE AT FAILURE:
  - e. YEAR OF FAILURE:
  - f. DID THIS FIRM USE ANY OF THE ASSISTANCE PROGRAMS PROVIDED BY THE SMALL BUSINESS ADMINISTRATION:      yes      no
9. HAS YOUR PRESENT FIRM USED GOVERNMENT ASSISTANCE:      yes      no
  - a. WHAT TYPE:
10. WHERE YOU AWARE THAT THE SMALL BUSINESS ADMINISTRATION HAS THE FOLLOWING PROGRAMS, HAVE YOU USED ANY OF THE PROGRAMS:
  - a. GOVERNMENT GUARANTEE LOANS:      yes      no      yes      no
  - b. MANAGEMENT TRAINING IN THE FORM OF:
    1. SEMINARS:      yes      no      yes      no
    2. LECTURES:      yes      no      yes      no



3. CLASSROOM TRAINING: yes no yes no

4. PUBLICATIONS: yes no yes no

c. MANAGEMENT ASSISTANCE AND ORGANIZATION:

yes no yes no

d. CONTRACTS SET ASIDE FOR COMPETITION AMONG ONLY SMALL BUSINESSES: yes no yes no

e. CONTRACTS WHICH CAN BE AWARDED TO QUALIFYING SMALL MINORITY OWNED BUSINESSES, WITHOUT COMPETITION.

yes no yes no

f. ASSISTANCE IN OBTAINING CONTRACTS AFTER THE CONTRACTING OFFICER HAS DETERMINED THAT A FIRM CANNOT BE RESPONSIVE.

yes no yes no

g. ASSISTS IN OBTAINING BONDING FOR SMALL FIRMS WHICH HAVE HAD A QUESTIONABLE PERFORMANCE HISTORY.

yes no yes no



**APPENDIX E**  
**CONTRACTOR BIDDING RECORD**



TITLE II  
CONTRACTORS  
BIDDING RECORD

FROM NORTHDIV SBA DATA 1981-1988

- Eliminated all bids not confirmed to be from Title II Contractors
- Eliminated all B(a) Contractor bids
- 104 Contracts
- 413 Individual Bids averaged
- CONTRACTS IN EXCESS OF \$10,000

$$n = 413 \quad \sum x^2 = 2313118$$

$$\sum x = 10630 \quad (\sum x)^2 = 112996900$$

$$\bar{x} = \frac{10630}{413} = +25.73\% \quad \text{Above Gov't Estimates}$$

$$s^2 = \frac{\sum x^2 - \frac{(\sum x)^2}{n}}{n-1} = \frac{2313118 - \frac{112996900}{413}}{412}$$

$$s^2 = 4950.28$$

$$s = 70.85\%$$

**BID PRICE  
ABOVE OR BELOW  
Gov't Estimate**

- ALL CONTRACTS ARE IN EXCESS OF \$10,000
- Eliminated all awards to non-Title II firms
- 75 Contracts } n was limited by the # of Title II awards recorded in the database.
- 75 Awards Averaged }

$$n = 75 \quad \sum x^2 = 88036$$

$$\sum x = 510 \quad (\sum x)^2 = 260100$$

$$\bar{x} = \frac{510}{75} = +6.8\% \quad \text{Above Gov't Estimate}$$

$$s^2 = \frac{88036 - \frac{260100}{75}}{74} =$$

$$s = 1142.81$$

$$s = 33.81\%$$

AVERAGE CONTRACT PRICE = \$1.7 MILLION

**AWARD PRICE  
ABOVE OR BELOW  
Gov't Estimate**



8A  
CONTRACTORS  
BIDDING RECORD

FROM: NORTHDIV SBA DATA 1981-1988

- ELIMINATED ALL NON 8A BIDS
- ELIMINATED ALL UNCONFIRMED 8A CONTRACTORS
- 33 INDIVIDUAL BIDS AVERAGED
- 20 CONTRACTS
- AVERAGE CONTRACT PRICE WAS \$1.2 MILLION.
- ALL CONTRACTS ARE IN EXCESS OF \$10,000

$$n = 33 \quad \sum x = 472994$$

$$\bar{x} = 2478 \quad (\sum x)^2 = 6140484$$

$$\bar{x} = \frac{2478}{33} = 75.1\% \text{ above the Gov't Estimate}$$

$$s^2 = \frac{472994 - \frac{6140484}{33}}{32}$$

$$s^2 = 8966.2$$

$$s = 94.7\%$$

BID PRICE  
ABOVE OR BELOW  
GOV'T ESTIMATE

- ELIMINATED ALL NON 8(A) AWARDS
- 12 AWARDS AVERAGED\*
- AVERAGE CONTRACT PRICE WAS
- ALL CONTRACTS ARE IN EXCESS OF \$10,000

$$n = 12$$

$$\sum x^2 = 1069$$

$$\bar{x} = 97 \quad (\sum x)^2 = 9409$$

$$\bar{x} = \frac{97}{12} = 8.08\% \text{ Above the Gov't Estimate}$$

$$s^2 = \frac{1069 - \frac{9409}{12}}{11} = 25.9$$

$$s^2 = 25.9$$

$$s = 5.09$$

AWARD PRICE  
ABOVE OR BELOW  
GOV'T ESTIMATE

\* MOST OF THE 8(A) BIDS WERE SO FAR FROM THE GOV'T ESTIMATE THAT THE CONTRACTS WERE READVERTISED AS TITLE II OR UNRESTRICTED CONTRACTS.



OPEN COMPETITION  
BIDDING RECORD

FROM: NORTHERN DIVISION SBA DATA 1981-1988

- CONTRACTS IN EXCESS OF \$10,000
- CONTRACTS CONSIDERED INCLUDE SET-ASIDE CONTRACTS BID ON IN ERROR BY LARGE CONTRACTORS AND UNRESTRICTED CONTRACTS BID ON BY SMALL FIRMS.
- PROVIDES THE OPPORTUNITY TO MAKE DIRECT COMPARISONS WITH THE TITLE II AND E(A) BIDDING RECORDS.
- ALL DATA IS FROM THE SAME DATABASE AS THE E(A) AND TITLE II ANALYSIS.
- 20 CONTRACTS
- 46 BIDS AVERAGED.
- 11 AWARDS MADE TO BIG BUSINESSES OF THE 20 CONTRACTS.

$$n=46$$

$$\Sigma x^2 = 69635$$

$$\Sigma x = 289$$

$$(\Sigma x)^2 = 83521$$

$$\bar{x} = \frac{289}{46} = 6.28\% \text{ Above the Gov't Estimate}$$

$$S^2 = \frac{69635 - \frac{83521}{46}}{45}$$

$$S^2 = 1507.1$$

$$S = 38.8\%$$

$$n=11$$

$$\Sigma x^2 = 9413.0$$

$$\Sigma x = -177 \quad (\Sigma x)^2 = 31329$$

$$\bar{x} = \frac{-177}{11} = -16.1\% \text{ Below the Gov't Estimate}$$

$$S^2 = \frac{9413 - \frac{31329}{11}}{10} = 656$$

$$S = 25.6\%$$

AWARD PRICE  
ABOVE OR BELOW  
GOV'T ESTIMATE

AWARD PRICE  
ABOVE OR BELOW  
GOV'T ESTIMATE



BIDDING AND AWARD RECORD  
Northern Division NAVFAC SEA database



CONTRACT#	OFFEROR	SB	F D E	BID	AMT EST	AWARD PRICE	ADP GDN <sup>1</sup>	% OF AWA
83-B-0067	HUTCHINS CO	Y		\$1,104,569.00	\$1,665,000.00		-33	ERROR
83-B-0067	PIRK ERIC	Y		\$1,610,000.00	\$1,665,000.00		-40	ERROR
83-B-0067	MICHAEL F	Y		\$2,278,000.00	\$1,665,000.00		-47	ERROR
83-B-0067	NOVA GROUP	Y		\$1,168,000.00	\$1,665,000.00		-29	ERROR
83-B-0067	PAUL J BAR	Y		\$1,134,000.00	\$1,665,000.00		-23	ERROR
83-B-0067	FUTLEF CON	Y		\$773,000.00	\$1,665,000.00		-54	ERROR
83-B-0068	ARNOLD M D	Y		\$1,180,216.00	\$2,655,000.00	\$1,172,000.00	-56	1
83-B-0068	G L C STATE	Y		\$1,252,000.00	\$2,655,000.00	\$1,172,000.00	-51	10
83-B-0068	WIFI BDOTH	Y		\$1,463,000.00	\$2,655,000.00	\$1,172,000.00	-47	20
83-B-0068	MICHAEL F	Y		\$3,643,000.00	\$2,655,000.00	\$1,172,000.00	37	211
83-B-0068	NOVA GROUP	Y		\$1,450,000.00	\$2,655,000.00	\$1,172,000.00	-44	27
83-B-0068	ENCLOSUREP			\$0.00	\$2,655,000.00	\$1,172,000.00	-100	-100
83-B-0068	FULTON CON	Y		\$1,172,010.00	\$2,655,000.00	\$1,172,000.00	-56	0
83-B-0069	ARNOLD M D	Y		\$1,428,021.00	\$2,673,000.00	\$1,429,021.00	-50	0
83-B-0069	G L C STATE	Y		\$1,443,500.00	\$2,673,000.00	\$1,443,021.00	-50	1
83-B-0069	TAMEE F DA	Y		\$2,778,000.00	\$2,673,000.00	\$1,429,021.00	-4	34
83-B-0069	LIRK ERIC	Y		\$1,755,850.00	\$2,673,000.00	\$1,429,021.00	-39	23
83-B-0069	NDS KAK IN	Y		\$4,473,000.00	\$2,673,000.00	\$1,429,021.00	55	213
83-B-0069	MICHAEL F	Y		\$3,425,000.00	\$2,673,000.00	\$1,429,021.00	19	140
83-B-0069	NOVA GROUP	Y		\$1,680,000.00	\$2,673,000.00	\$1,429,021.00	-42	18
83-B-0069	PAUL J ERG	Y		\$2,154,500.00	\$2,673,000.00	\$1,429,021.00	-24	54
83-B-0069	PHILLYKIR			\$0.00	\$2,673,000.00	\$1,429,021.00	-100	-100
83-B-0069	REITER CON	Y		\$1,493,000.00	\$2,673,000.00	\$1,429,021.00	-48	4
83-B-0116	HERA ELEVA	Y		\$766,570.00	\$386,000.00		104	ERROR
83-B-0116	WESTLAY MA	Y		\$656,000.00	\$386,000.00		55	ERROR
83-B-0161	A J ERIC	Y		\$187,515.00	\$123,000.00	\$149,961.00	60	32
83-B-0161	ANGELO'S C	Y		\$163,664.00	\$123,000.00	\$149,961.00	37	13
83-B-0161	ATLANTIC C	Y		\$203,100.00	\$123,000.00	\$149,961.00	130	89
83-B-0161	CER CONSTP	Y		\$161,000.00	\$123,000.00	\$149,961.00	31	7
83-B-0161	DRIVE-IN C	Y		\$149,961.00	\$123,000.00	\$149,961.00	22	0
83-B-0161	HAMILTON C	Y		\$128,450.00	\$123,000.00	\$149,961.00	86	52
83-B-0161	JARRO BLDG	Y		\$163,361.00	\$123,000.00	\$149,961.00	93	3
83-B-0161	KEM CONSTR	Y		\$166,320.00	\$123,000.00	\$149,961.00	27	4
83-B-0161	MONIAROB C	Y		\$266,000.00	\$123,000.00		116	ERROR
83-B-0161	FULSAR CON	Y		\$164,414.00	\$123,000.00	\$149,961.00	50	29
83-B-0161	SEVILLE CO	Y		\$263,263.00	\$123,000.00	\$149,961.00	106	69
83-B-0161	WEIBER C WD	Y		\$232,056.00	\$123,000.00	\$149,961.00	65	55
83-B-0161	FLCCRRPA I	Y		\$65,111.00	\$52,000.00	\$68,000.00	33	2
83-B-0161	HAMPTON EE	Y		\$147,000.00	\$52,000.00	\$68,000.00	183	116
83-B-0161	LAME CO IN	Y		\$66,000.00	\$52,000.00	\$68,000.00	79	37
83-B-0161	MAGNUM INC	Y		\$95,400.00	\$52,000.00	\$68,000.00	83	40
83-B-0161	RICHARD DE	Y		\$157,000.00	\$52,000.00	\$68,000.00	273	190
83-B-0161	STEELAR IN	Y		\$55,820.00	\$52,000.00	\$68,000.00	34	2
83-B-0161	TEFA-LITE	Y		\$107,076.00	\$52,000.00	\$68,000.00	106	57
83-B-0161	UNITED CON	Y		\$66,060.00	\$52,000.00	\$68,000.00	31	0
83-B-0301	HOPE BUILD	Y		\$10,004,000.00	\$7,400,000.00		35	ERROR
83-B-0305	I S C	?		\$606,000.00	\$614,148.00	\$609,787.00	37	25
83-B-0305	J S EDWARD	?		\$776,000.00	\$614,148.00	\$609,787.00	27	16
83-B-0305	LCNE STAR	?		\$623,800.00	\$614,148.00	\$609,787.00	34	23
83-B-0305	M G ALLEN	?		\$392,000.00	\$614,148.00	\$609,787.00	45	33
83-B-0305	MARON CONC	?		\$516,811.00	\$614,148.00	\$609,787.00	48	37
83-B-0305	SAMPANATO	?		\$603,737.00	\$614,148.00	\$609,787.00	9	0



CONTRACT#	OFFEROR	SB	S O E	BID	GOVT EST	AWARD PRICE	%OF GOV'	% OF AVG
83-B-0305	SWERCO COR	?		\$392,000.00	\$814,148.00	\$869,767.00	45	33
83-B-0309	DONATO SPA	Y		\$228,000.00	\$913,000.00	\$779,000.00	-10	6
83-B-0309	MAGNUM INC	?		\$877,000.00	\$819,000.00	\$779,000.00	-5	13
83-B-0309	MARTELL CO	Y		\$773,000.00	\$819,000.00	\$779,000.00	-15	0
83-B-0309	R G RIFFER	Y		\$876,123.00	\$819,000.00	\$779,000.00	-5	12
83-B-0392	MARTELL CO	Y		\$202,000.00	\$111,000.00		82	ERROR
83-B-0392	FRAUGHT CO	Y		\$377,900.00	\$111,000.00	\$227,000.00	240	66
83-B-0392	RANDO CONS	Y		\$227,000.00	\$111,000.00	\$227,000.00	105	0
83-B-0504	???????? BR	?		\$4,527,000.00	\$6,584,000.00	\$4,360,000.00	-31	4
83-B-0504	ARTCO CONT	Y		\$4,653,601.00	\$6,584,000.00	\$4,360,000.00	-29	7
83-B-0504	AUDIO CENT	?		\$24,950.00	\$6,584,000.00	\$4,360,000.00	-100	-33
83-B-0504	GERACE CON	Y		\$4,700,000.00	\$6,584,000.00	\$4,360,000.00	-23	8
83-B-0504	SPENCE ERD	Y		\$4,527,000.00	\$6,584,000.00	\$4,360,000.00	-31	4
83-B-0504	THE CRISTM	N		\$4,51E,000.00	\$6,584,000.00	\$4,360,000.00	-31	4
83-B-0504	THE GERACE	Y		\$4,450,000.00	\$6,584,000.00	\$4,360,000.00	-32	2
83-B-0517	ANDERSON B	Y	Y	\$767,000.00	\$521,385.00		47	ERROR
83-B-0517	CONTRACTIN	Y	Y	\$3,100,000.00	\$521,385.00		495	ERROR
83-B-0517	ESTES COMF	Y	Y	\$2,000,000.00	\$521,385.00		284	ERROR
83-B-0517	H L J PLUM	Y	Y	\$721,000.00	\$521,385.00		38	ERROR
83-B-0517	HENRY R. S	Y	Y	\$908,800.00	\$521,385.00		74	ERROR
83-B-0517	INTERSTATE	Y	Y	\$521,700.00	\$521,385.00		88	ERROR
83-B-0520	E C I CONS	Y		\$3,311,13E.00	\$3,269,500.00	\$3,200,000.00	1	3
83-B-0520	MCINTURE B	Y		\$4,271,800.00	\$3,269,500.00	\$3,200,000.00	31	33
83-B-0520	FLOWER L SD	Y		\$3,887,000.00	\$3,269,500.00	\$3,200,000.00	13	15
83-B-0520	WEDDLE ERD	Y		\$3,200,000.00	\$3,269,500.00	\$3,200,000.00	-2	0
83-B-0545	BORD DEVEL	Y		\$1,61E,000.00	\$1,458,000.00	\$1,616,000.00	11	0
83-B-0545	MARTELL CO	Y		\$2,094,000.00	\$1,458,000.00	\$1,616,000.00	44	30
83-B-0545	FRAGNIM IN	Y		\$1,677,764.00	\$1,458,000.00	\$1,616,000.00	15	4
83-B-0545	RIFPER INC	Y		\$1,762,129.00	\$1,458,000.00	\$1,616,000.00	21	9
83-B-0548	BORD DEVEL	Y		\$8,211,393.00	\$6,353,000.00		29	ERROR
83-B-0609	ABJ ENTERP	Y		\$416,895.00	\$510,100.00	\$446,895.00	-12	0
83-B-0609	CG FIELD &	Y		\$1,000,000.00	\$510,100.00	\$446,895.00	96	124
83-B-0609	DAHN EBUILD	Y		\$496,869.00	\$510,100.00	\$446,895.00	-3	11
83-B-0609	LOEFFEL EN	Y		\$1,000,000.00	\$510,100.00	\$446,895.00	96	124
83-B-0609	M G ASTLEF	Y		\$5,020,000.00	\$510,100.00	\$446,895.00	696	1037
83-B-0609	HAERTENS-E	Y		\$1,500,000.00	\$510,100.00	\$446,895.00	194	236
83-B-0609	MORCON CON	Y		\$466,580.00	\$510,100.00	\$446,895.00	-9	4
83-B-0609	PHILLIPS E	?		\$1,000,000.00	\$510,100.00	\$446,895.00	96	124
83-B-0609	S L & K CO	Y		\$45E,600.00	\$510,100.00	\$446,895.00	-10	2
83-B-0543	MID-CON IN	Y		\$250,000.00	\$141,895.00		76	ERROR
83-B-0643	R W. EDGAR	Y		\$300,000.00	\$141,895.00		111	ERROR
83-B-0645	JAMES MANF	Y		\$1,484,900.00	\$912,200.00	\$878,685.00	E3	69
83-B-0645	KNICKERBOD	Y		\$1,394,000.00	\$912,200.00	\$878,685.00	53	59
83-B-0645	LGVLIC CO	Y		\$927,493.00	\$912,200.00	\$878,685.00	2	6
83-B-0645	RD-MAR CON	--		\$878,685.00	\$912,200.00	\$878,685.00	-4	0
83-B-0695	GRAVES FLU	Y		\$651,681.00	\$862,823.00	\$681,681.00	-21	0
83-B-0695	HARRELL ME	Y		\$703,984.00	\$862,823.00	\$681,681.00	-18	4
83-B-0695	GREEN GEN	Y		\$754,000.00	\$862,823.00	\$681,681.00	-12	11
83-B-0695	TRIANGLE L	Y		\$774,596.00	\$862,823.00	\$681,681.00	-10	14
84-B-4646	SCHAFFER	Y		\$61,815.00	\$76,053.00		-32	ERROR
84-B-4646	THREE-WAY	Y		\$42,852.00	\$76,053.00		-44	ERROR
84-B-5015	AMERICAN C	Y		\$1,683,892.00	\$1,492,465.00	\$1,366,000.00	27	36



CONTRACT#	OFFEROR	SB	B/C/E	BID	GOVT EST	AWARD PRICE	% OF GOVT	% OF AWD
84-B-0002	CBT	Y		\$1,424,000.00	\$1,482,465.00	\$1,366,000.00	-5	4
84-B-0003	G S E A ZA	Y		\$1,710,951.00	\$1,462,465.00	\$1,366,000.00	15	25
84-B-0005	LABOR INC	Y		\$1,966,000.00	\$1,462,465.00	\$1,366,000.00	-8	0
84-B-0006	DANLADI CO	Y	N	\$1,721,300.00	\$1,482,465.00	\$1,366,000.00	17	23
84-B-0006	D NEVEMARK	Y		\$0,565,000.00	\$0,509,117.00		35	ERROR
84-B-0009	G L C ENTE	Y		\$2,721,000.00	\$2,505,117.00		9	ERROR
84-B-0009	GAPUTT CON	Y		\$2,721,000.00	\$2,505,117.00		9	ERROR
84-B-0010	FEITER CON	--		\$1,117,000.00	\$601,125.00	\$1,117,000.00	23	0
84-B-0011	--	--		\$0.00	\$0.00	\$0.00	0	0
84-B-0014	GAER & DUF	Y		\$671,800.00	\$385,561.00		43	ERROR
84-B-0014	HEALTH HEA	Y		\$672,000.00	\$385,561.00		-4	ERROR
84-B-0014	MATTELL CO	Y		\$422,600.00	\$385,561.00		12	ERROR
84-B-0014	RANEE ZONE	Y		\$612,600.00	\$385,561.00		-14	ERROR
84-B-0014	SEAZAAR Z	Y		\$387,000.00	\$385,561.00		0	ERROR
84-B-0014	WEBBETT ZL	Y		\$461,449.00	\$385,561.00		21	ERROR
84-B-0018	BLAYRELEY	--		\$2,631,600.00	\$2,818,860.00	\$2,087,000.00	-6	26
84-B-0019	WATERPOINT	Y		\$2,498,600.00	\$2,818,860.00	\$2,087,000.00	-11	20
84-B-0019	WHALING ZI	Y		\$2,087,000.00	\$2,818,860.00	\$2,087,000.00	-29	0
84-B-0024	E L W CONS	Y		\$654,000.00	\$657,000.00		58	ERROR
84-B-0031	DANLADI CO	Y		\$4,743,000.00	\$5,000,000.00	\$4,640,000.00	-5	2
84-B-0031	ELLIOTT LE	Y		\$4,673,000.00	\$5,000,000.00	\$4,640,000.00	-7	1
84-B-0031	G L C ENTE	Y		\$5,273,000.00	\$5,000,000.00	\$4,640,000.00	6	14
84-B-0031	GIBSON HAR	Y		\$4,843,000.00	\$5,000,000.00	\$4,640,000.00	-7	0
84-B-0031	REITER CON	Y		\$1,771,000.00	\$5,000,000.00	\$4,640,000.00	-5	3
84-B-0037	ARNOLD R	Y		\$3,456,600.00	\$3,143,000.00		10	ERROR
84-B-0037	KIRK EROTH	Y		\$0,310,000.00	\$3,143,000.00		5	ERROR
84-B-0037	REITER CON	Y		\$3,872,000.00	\$3,143,000.00		7	ERROR
84-B-0037	SUPERCO SER	Y		\$3,323,000.00	\$3,143,000.00		6	ERROR
84-B-0037	FIDUND IND			\$1,179,061.26	\$3,143,000.00		-63	ERROR
84-B-0041	A P ELEC	Y		\$189,535.00	\$172,000.00	\$184,000.00	16	8
84-B-0041	ANGELCO CO	Y		\$280,000.00	\$172,000.00	\$184,000.00	63	52
84-B-0041	BLAIRCON B	Y		\$240,000.00	\$172,000.00	\$184,000.00	43	34
84-B-0041	FONTAS CON	Y		\$210,000.00	\$172,000.00	\$184,000.00	21	14
84-B-0041	GUACELLI E	Y		\$221,000.00	\$172,000.00	\$184,000.00	28	20
84-B-0041	SAMEE CONS	Y		\$244,200.00	\$172,000.00	\$184,000.00	42	33
84-B-0041	UNITED CON	Y		\$184,000.00	\$172,000.00	\$184,000.00	7	0
84-B-0041	DANLADI CO	Y	N	\$276,000.00	\$172,000.00	\$184,000.00	60	50
84-B-0043	EER MAGNES	Y		\$72,662.00	\$100,000.00	\$53,810.00	-23	42
84-B-0043	BILL STRON	Y		\$118,932.00	\$100,000.00	\$53,810.00	20	123
84-B-0043	DEL-VAL ME	Y		\$105,610.00	\$100,000.00	\$53,810.00	6	97
84-B-0043	DOLAN MECH	Y		\$100,300.00	\$100,000.00	\$53,810.00	0	96
84-B-0043	FUTURA CO.	Y		\$64,400.00	\$100,000.00	\$53,810.00	-36	20
84-B-0043	GRAZY'S VE	Y		\$83,023.98	\$100,000.00	\$53,810.00	-15	59
84-B-0043	HEM AND SC	Y		\$63,547.00	\$100,000.00	\$53,810.00	-41	9
84-B-0043	HONER A&Z	Y		\$63,810.00	\$100,000.00	\$53,810.00	-45	0
84-B-0043	J & L PLUM	Y		\$84,329.00	\$100,000.00	\$53,810.00	-16	57
84-B-0043	JOHN E ME	Y		\$60,186.00	\$100,000.00	\$53,810.00	-10	56
84-B-0043	MELVILLE Z	Y		\$76,128.00	\$100,000.00	\$53,810.00	-24	41
84-B-0043	MODERN REC	Y		\$67,840.00	\$100,000.00	\$53,810.00	-12	63
84-B-0043	P.L.B CO.	Y		\$67,200.00	\$100,000.00	\$53,810.00	-3	81
84-B-0043	SCHAFFER E	Y		\$77,059.04	\$100,000.00	\$53,810.00	-23	43
84-B-0043	STRIFFORD	Y		\$63,380.00	\$100,000.00	\$53,810.00	-10	65



CONTRACT#	OFFEROR	SE	S O B	BID	GOVT EST	AWARD PRICE	ZDF gDV	% OF AWA
84-B-0040	UNION SOIL	Y		\$67,617.00	\$100,000.00	\$69,910.00	-12	63
84-B-0040	W.M. F. GAV	Y		\$65,293.00	\$100,000.00	\$63,910.00	-45	3
84-B-0040	DEL VAL ME	Y		\$4,266,620.00	\$2,781,000.00		55	ERROR
84-B-0045	HEARTH HTG	Y		\$2,782,000.00	\$2,781,000.00		85	ERROR
84-B-0046	KCB KAM IN	Y		\$4,160,000.00	\$2,781,000.00		47	ERROR
84-E-0047	ADVANCE ME	Y		\$178,000.00	\$503,000.00	\$129,924.00	-65	67
84-B-0047	CAPITAL ME	Y		\$515,000.00	\$503,000.00	\$129,924.00	0	233
84-B-0047	DOLAN MECH	Y		\$184,800.00	\$503,000.00	\$129,924.00	-63	42
84-B-0047	HUTCHINSON	Y		\$212,989.00	\$503,000.00	\$129,924.00	-58	64
84-B-0047	J J EEE ME	Y		\$343,882.00	\$503,000.00	\$129,924.00	-32	165
84-B-0047	SCHAFFER	Y		\$123,924.00	\$503,000.00	\$129,924.00	-74	0
84-B-0047	WILLIAM F	Y		\$388,171.00	\$503,000.00	\$129,924.00	-23	199
84-E-0048	ADVANCED M	Y		\$672,000.00	\$1,122,000.00	\$548,100.00	-22	59
84-B-0048	ADVANCED M	Y		\$672,000.00	\$1,122,000.00	\$548,100.00	-22	59
84-B-0048	COTTMAN ME	Y		\$564,100.00	\$1,122,000.00	\$548,100.00	-48	7
84-B-0048	COTTMAN ME	N		\$548,100.00	\$1,122,000.00	\$548,100.00	-51	0
84-B-0048	JAMES F DA	Y		\$738,000.00	\$1,122,000.00	\$548,100.00	-34	35
84-B-0048	JAMES F. D	Y		\$735,000.00	\$1,122,000.00	\$548,100.00	-34	35
84-B-0048	MICHAEL C.	Y		\$697,400.00	\$1,122,000.00	\$548,100.00	-38	27
84-E-0048	PAUL J ERD	Y		\$0.00	\$1,122,000.00	\$548,100.00	-100	-100
84-B-0048	REITER CON	Y		\$647,000.00	\$1,122,000.00	\$548,100.00	-42	18
84-B-0048	FEITER CON	Y		\$617,000.00	\$1,122,000.00	\$548,100.00	-42	18
84-B-0048	W F GAVIN	Y		\$947,634.00	\$1,122,000.00	\$548,100.00	-16	72
84-B-0048	MICHAEL C	Y		\$697,400.00	\$1,122,000.00	\$548,100.00	-38	27
84-B-0048	W F. GAVIN	Y		\$347,634.00	\$1,122,000.00	\$548,100.00	-16	73
84-B-0049	DEL-VAL ME	Y		\$1,746,206.19	\$1,258,000.00		89	ERROR
84-B-0049	BANLADI CO	Y	Y	\$2,473,000.00	\$1,258,000.00		96	ERROR
84-B-0053	ROSS-APPACO	Y	Y	\$1,772,000.00	\$1,258,000.00		47	ERROR
84-B-0102	REITER CON	Y		\$638,000.00	\$638,000.00	\$507,000.00	-16	6
84-B-0102	SCHAFFER E	Y		\$618,292.00	\$638,000.00	\$507,000.00	-2	22
84-B-0102	WILLIAM F	Y		\$908,437.00	\$638,000.00	\$507,000.00	-5	20
84-B-0102	PPRAUERT CO	Y		\$698,600.00	\$638,000.00	\$507,000.00	36	71
84-B-0103	ADVANCED M	Y		\$664,000.00	\$636,000.00		48	ERROR
84-B-0103	COTTMAN ME	N		\$774,100.00	\$636,000.00		82	ERROR
84-B-0103	DOLAN MECH	Y		\$537,000.00	\$636,000.00		2	ERROR
84-B-0103	HUTCHINSON	N		\$944,989.00	\$636,000.00		41	ERROR
84-B-0103	SHAFER B I	Y		\$618,000.00	\$636,000.00		40	ERROR
84-B-0122	ARNOLD M.	Y		\$2,247,500.00	\$1,259,000.00	\$1,484,400.00	73	51
84-B-0122	DEL-VAL ME	Y		\$1,598,680.00	\$1,259,000.00	\$1,484,400.00	51	28
84-B-0122	ELLIOTT-LE	Y		\$2,253,000.00	\$1,259,000.00	\$1,484,400.00	79	52
84-B-0122	MORRIS IRE	Y		\$1,569,063.00	\$1,259,000.00	\$1,484,400.00	60	12
84-B-0122	REITER CON	Y		\$1,727,000.00	\$1,259,000.00	\$1,484,400.00	37	16
84-B-0122	SWERIG COR	Y		\$1,555,000.00	\$1,259,000.00	\$1,484,400.00	27	7
84-B-0122	UNITED ERE	Y		\$1,464,400.00	\$1,259,000.00	\$1,484,400.00	18	0
84-B-0123	DEL-VAL ME	Y		\$619,503.00	\$644,600.00	\$589,884.00	27	39
84-B-0123	DOLAN MECH	Y		\$624,000.00	\$644,600.00	\$589,884.00	-2	8
84-B-0123	G & C ENTE	Y		\$655,000.00	\$644,600.00	\$589,884.00	2	11
84-B-0123	HUTCHINSON	Y		\$664,959.00	\$644,600.00	\$589,884.00	6	18
84-B-0123	KIRK ERDT	Y		\$657,700.00	\$644,600.00	\$589,884.00	8	16
84-B-0123	NORTH AMER	Y		\$659,260.00	\$644,600.00	\$589,884.00	33	46
84-E-0123	SCHAFFER E	Y		\$689,534.00	\$644,600.00	\$589,884.00	-6	0
84-B-0131	DONATO EPA	Y		\$373,560.00	\$1,068,349.00		100	ERROR



CONTRACT #	OFFEROR	CB	S C E	BID	GOVT EST	AVERAGE PRICE	% OF GOV'	% OF AVG
84-E-0164	CARRELL E	Y		\$278,000.00	\$186,549.00		45	ERROR
84-B-0164	MARSH INC	Y		\$247,750.00	\$186,549.00		64	ERROR
84-B-0164	MARTELL CO	Y		\$215,000.00	\$186,549.00		67	ERROR
84-B-0164	PEN E ILD	N		\$265,000.00	\$186,549.00		35	ERROR
84-B-0164	RANEE CONT	Y		\$364,000.00	\$186,549.00		67	ERROR
84-E-0164	SOFAEFFER	Y		\$747,534.00	\$186,549.00		84	ERROR
84-B-0164	UNITED CON	Y		\$208,000.00	\$186,549.00		58	ERROR
84-E-0164	WILLIAMS F	Y		\$207,573.00	\$186,549.00		52	ERROR
84-B-0165	MISUMI, INC	Y		\$421,592.00	\$186,000.00	\$186,972.00	11	3
84-B-0165	MARTELL CO	Y		\$787,560.00	\$186,000.00	\$468,572.00	81	68
84-B-0165	COASTAL LA	Y		\$369,554.00	\$186,556.00	\$353,000.00	23	10
84-B-0165	DOLAN MECH	N		\$373,053.00	\$186,986.00	\$363,000.00	20	7
84-B-0165	GAUNTT CON	Y		\$353,000.00	\$186,986.00	\$353,000.00	12	0
84-B-0165	MASAMU INC	Y		\$361,265.00	\$186,556.00	\$362,000.00	26	13
84-B-0165	PIONEER CO	Y		\$308,122.00	\$186,986.00	\$293,000.00	6	76
84-B-0165	SMI LUCAS	Y		\$276,575.00	\$186,556.00	\$283,000.00	51	25
84-B-0165	BIRD REVEL	Y		\$3,245,000.00	\$3,510,000.00	\$3,160,000.00	-8	2
84-B-0165	G KERENASH	Y		\$3,458,000.00	\$3,510,000.00	\$3,180,000.00	-2	9
84-B-0165	E P GIDI	Y		\$3,515,377.00	\$3,510,000.00	\$3,160,000.00	-0	11
84-B-0165	B J C ENTE	Y		\$3,180,000.00	\$3,510,000.00	\$3,180,000.00	-10	0
84-B-0165	GAUNTT CON	Y		\$3,165,500.00	\$3,510,000.00	\$3,160,000.00	-5	0
84-B-0165	J POOR COR	Y		\$3,168,000.00	\$3,510,000.00	\$3,160,000.00	-1	9
84-B-0165	MARTELL CO	Y		\$3,862,300.00	\$3,510,000.00	\$3,180,000.00	10	21
84-B-0165	ROBERT G R	Y		\$3,826,122.00	\$3,510,000.00		-6	ERROR
84-B-0165	ERNEST S	Y		\$3,361,500.00	\$3,573,000.00	\$3,042,000.00	25	19
84-B-0165	REEDICER C	Y		\$3,140,410.00	\$3,573,000.00	\$3,041,000.00	17	8
84-B-0165	LILTON BEN	Y		\$3,042,000.00	\$3,573,000.00	\$3,042,000.00	14	0
84-B-0165	BAILEFIELD C	Y		\$1,158,542.00	\$3,500,000.00	\$1,438,840.00	23	0
84-B-0165	B BLUDORN	Y		\$1,447,011.00	\$3,600,000.00	\$1,438,840.00	24	0
84-B-0165	LE BARKING	Y		\$5,277,488.00	\$3,610,000.00	\$1,438,840.00	47	19
84-B-0165	CLAP FITI	Y		\$13,485,573.00	\$30,580,000.00		43	ERROR
84-B-0165	MERGENTIME	N		\$12,166,522.00	\$30,580,000.00		40	ERROR
84-B-0165	REFINI COR	Y		\$87,643,095.00	\$30,580,000.00		90	ERROR
84-B-0165	YONKERE CO	N		\$45,160,000.00	\$30,580,000.00		43	ERROR
84-B-0165	FEED L FREE	Y		\$2,355,000.00	\$2,671,160.00		11	ERROR
84-B-0165	SHASTA CO	Y		\$2,440,000.00	\$2,671,160.00		-5	ERROR
84-B-0165	M G ALLEV	Y		\$1,540,000.00	\$2,094,000.00		41	ERROR
84-B-0165	MOLDMY L P	Y		\$1,654,000.00	\$2,094,000.00		51	ERROR
84-B-0165	PAGE CONET	Y		\$1,667,000.00	\$2,094,000.00		54	ERROR
84-B-0165	MID MAINE	Y		\$203,000.00	\$404,553.00		-5	ERROR
84-B-0165	STRUM CRAFT	Y		\$473,347.00	\$104,953.00		17	ERROR
84-B-0165				\$2,150,231.00	\$2,165,000.00	\$2,150,231.00	-1	0
84-B-0165	COLWELL CO	Y		\$236,505.00	\$2,165,000.00	\$2,150,231.00	-89	-89
84-B-0165	CONSOLIDAT	Y		\$2,083,561.00	\$2,156,000.00	\$2,150,231.00	9	9
84-B-0165	H E MAC I	Y		\$2,189,500.00	\$2,165,000.00	\$2,150,231.00	19	19
84-B-0165	H J SCOPE	Y		\$1,533,876.00	\$2,165,000.00	\$2,150,231.00	17	19
84-B-0165	NATIONALWIDE	Y		\$153,521.00	\$706,000.00	\$899,621.00	27	0
84-B-0165	ATLANTIC E	N		\$171,341.00	\$150,000.00		64	ERROR
84-B-0165	E L GREA	N		\$278,762.00	\$150,000.00		48	ERROR
84-B-0165	C PYRAMID	Y		\$1,456,050.00	\$306,877.00		53	ERROR
84-B-0165	MARTELL CO	Y		\$1,316,100.00	\$306,877.00		49	ERROR
84-B-0165	DANACI CO	Y		\$1,406,000.00	\$306,877.00		58	ERROR



CONTRACT#	OFFEROR	SB	S D B	BID	GOV'T EST	AWARD PRICE	% OF GOV'	% OF AIA
84-B-0355	D.L. FOWLER	Y		\$1,301,344.00	\$907,000.00	\$1,167,000.00	65	14
84-E-0357	HARRY G. C	Y		\$3,563,332.00	\$3,549,000.00		12	ERROR
84-B-0359	ASIELE CON	Y		\$1,397,300.00	\$825,700.00	\$767,000.00	63	82
84-B-0359	CHARPY COR	Y		\$992,680.00	\$825,700.00	\$767,000.00	20	29
84-B-0359	COKEN COMP	Y		\$868,547.00	\$825,700.00	\$767,000.00	5	13
84-B-0359	E W AUDET	Y		\$777,729.00	\$825,700.00	\$767,000.00	-6	1
84-B-0359	JAMES J O'	Y		\$1,004,800.00	\$825,700.00	\$767,000.00	22	31
84-B-0359	FOTMAN ELE	Y		\$862,000.00	\$825,700.00	\$767,000.00	4	12
84-B-0359	THE RYAN C	Y		\$767,000.00	\$825,700.00	\$767,000.00	-7	0
84-B-0359	WILLIAMS E	Y		\$261,817.00	\$825,700.00	\$767,000.00	4	12
84-B-0360	MAGNUM INC	Y		\$429,908.00	\$227,000.00		89	ERROR
84-B-0432	DEBANTO CO	?		\$148,000.00	\$99,330.00	\$148,000.00	49	0
84-B-0432	KEM CONSTR	Y		\$167,320.00	\$99,330.00	\$148,000.00	68	13
84-B-0432	TEXAS ELEN	Y		\$248,000.00	\$99,330.00	\$148,000.00	150	68
84-B-0432	UNICORN DE	?		\$168,530.00	\$99,330.00	\$148,000.00	70	14
84-B-0432	VALCO INC	Y		\$148,500.00	\$99,330.00	\$148,000.00	50	0
84-B-0432	NO BIDS RE	-	-	ERROR	ERROR	\$148,000.00	ERROR	ERROR
84-B-0476	DAVIEVILLE	Y		\$704,560.00	\$662,000.00		3	ERROR
84-B-0506	SUEPCO COR	Y		\$2,741,774.00	\$2,803,000.00	\$2,741,744.00	-2	0
84-B-0506	W. LALEH C	Y		\$3,550,000.00	\$2,803,000.00	\$2,741,744.00	29	31
84-B-0509	A P O'HORG	Y		\$3,465,000.00	\$3,035,000.00	\$3,465,000.00	14	0
84-B-0509	JACOB GIBED	Y		\$3,547,000.00	\$3,035,000.00	\$3,465,000.00	30	14
84-E-0509	MAYERDOW C	Y		\$4,217,555.00	\$3,035,000.00	\$3,465,000.00	29	22
84-E-0509	MIKE COATE	Y		\$3,955,620.00	\$3,035,000.00	\$3,465,000.00	30	14
84-B-0509	THE CONTI	Y		\$5,000,000.00	\$3,035,000.00	\$3,465,000.00	65	14
84-B-0514	GAFFREY CO	Y		\$1,276,000.00	\$200,000.00		60	ERROR
84-B-0514	H V ALLEN	Y		\$385,000.00	\$200,000.00		24	ERROR
84-B-0514	MIDDLESEY	Y		\$100,450.00	\$200,000.00		-67	ERROR
84-B-0514	FFAUGHT CO	Y		\$930,000.00	\$200,000.00		23	ERROR
84-B-0514	TLT CONST	Y		\$1,633,000.00	\$200,000.00		112	ERROR
84-B-0516	B STROMBER	Y		\$3,110,917.00	\$2,911,000.00	\$3,110,917.00	7	0
84-B-0516	CERTIFIED	Y		\$2,625,000.00	\$2,911,000.00	\$3,110,917.00	-3	-9
84-B-0518	G ELIUOZIU	?		\$3,331,900.00	\$2,911,000.00	\$3,110,917.00	17	3
84-B-0518	L E IANNIN	?		\$3,765,795.00	\$2,911,000.00	\$3,110,917.00	30	21
84-B-0518	W A RAMOL	?		\$3,258,014.00	\$2,911,000.00	\$3,110,917.00	15	8
84-B-0533	BORD DEVEL	N		\$7,190,000.00	\$7,200,000.00	\$7,190,000.00	-6	0
84-E-0533	G & C ENTE	Y		\$7,557,000.00	\$7,200,000.00	\$7,190,000.00	5	5
84-B-0533	J J WHITE	N		\$8,830,000.00	\$7,200,000.00	\$7,190,000.00	23	23
84-B-0533	THE CARLSD	N		\$8,478,780.00	\$7,200,000.00	\$7,190,000.00	18	18
84-B-0533	DANLADI CO	Y	Y	\$9,343,000.00	\$7,200,000.00	\$7,190,000.00	30	30
84-B-0601	ENGEL CONS	?		\$820,000.00	\$531,000.00		54	ERROR
84-E-0601	GIFCO INC	Y		\$795,480.00	\$531,000.00		49	ERROR
84-B-0601	PRAUGHT CO	Y		\$1,149,000.00	\$531,000.00		116	ERROR
84-B-0601	WAITE MOOR	Y		\$975,000.00	\$531,000.00		84	ERROR
84-B-0604	ATLANTIC D	Y		\$197,300.00	\$0.00	\$197,300.00	ERROR	0
84-B-0604	CROSS BAY	?		\$495,000.00	\$0.00	\$197,300.00	ERROR	151
84-B-0604	GATEWAY BE	Y		\$274,465.00	\$0.00	\$197,300.00	ERROR	39
84-B-0604	GEO W ROGE	Y		\$236,760.00	\$0.00	\$197,300.00	ERROR	15
84-B-0604	JUET-TRAN	N		\$477,000.00	\$0.00	\$197,300.00	ERROR	142
84-B-0604	OPEN CONTR	N		\$260,000.00	\$0.00	\$197,300.00	ERROR	32
84-B-0604	WATERFRONT	?		\$265,364.00	\$0.00	\$197,300.00	ERROR	35
84-B-0606	B S. MCAR	Y		\$425,000.00	\$395,000.00	\$409,606.00	6	4



CONTRACT#	OFFEROR	SE	E D E	BID	GOV'T EST	AWARD PRICE	%DF gCIV	% OF ARA
84-B-0608	CALMERS CO	Y		\$409,808.00	\$395,000.00	\$409,808.00	4	0
84-B-0608	FONTAE COR	Y		\$409,020.00	\$395,000.00	\$409,808.00	18	14
84-B-0608	GEORGE KOL	Y		\$477,700.00	\$395,000.00	\$409,808.00	21	17
84-B-0608	RICHARD H	Y		\$528,000.00	\$395,000.00	\$409,808.00	34	29
84-B-0608	TIDEA CORP	Y		\$519,500.00	\$395,000.00	\$409,808.00	31	26
84-B-0610	R J DELMON	Y		\$2,178,415.00	\$1,990,000.00	\$2,178,415.00	15	0
84-B-0610	REYNOLD EP	Y		\$2,065,374.00	\$1,860,000.00	\$2,178,415.00	52	32
84-B-0620	BILT-RITE	Y		\$1,887,802.00	\$1,080,000.00	\$1,299,750.00	75	45
84-B-0620	ECBQ DEVEL	Y		\$1,299,750.00	\$1,080,000.00	\$1,299,750.00	20	0
84-B-0620	D KEMEASH	Y		\$1,080,000.00	\$1,080,000.00	\$1,299,750.00	56	30
84-B-0620	GAMETT COR	Y		\$1,469,000.00	\$1,080,000.00	\$1,299,750.00	36	13
84-B-0620	MAGIUM INC	Y		\$1,413,825.00	\$1,080,000.00	\$1,299,750.00	31	9
84-B-0620	MARTELL CO	Y		\$1,517,200.00	\$1,080,000.00	\$1,299,750.00	40	17
84-B-0620	STD EP ECU	Y		\$1,000.00	\$1,080,000.00	\$1,299,750.00	-100	-100
84-B-0620	DANLADI CO	Y	N	\$1,029,700.00	\$1,080,000.00	\$1,299,750.00	52	26
84-B-0620	BAYSTATE C	Y		\$395,000.00	\$570,244.00	\$758,900.00	57	18
84-B-0620	GARFNEY CO	Y		\$395,000.00	\$570,244.00	\$758,900.00	69	27
84-B-0620	K THOMPSON	Y		\$395,000.00	\$570,244.00	\$7,758,900.00	50	-89
84-B-0620	V T RICH C	Y		\$765,900.00	\$570,244.00	\$758,900.00	38	4
84-B-0624	FOUR D ELE	Y		ERROR	\$181,000.00	\$236,231.00	ERROR	ERROR
84-B-0624	F & B, INC	Y		\$206,231.00	\$182,000.00	\$236,231.00	30	0
84-B-0659	JAMES H MA	Y		\$109,500.00	\$112,000.00		66	ERROR
84-B-0675	HAMMITT CO	Y		\$367,000.00	\$245,000.00	\$367,000.00	49	0
84-B-0675	INTERIOR S	Y		\$765,771.00	\$245,000.00	\$367,000.00	220	115
84-B-0684	JOHN PUGI	Y		\$245,000.00	\$24,000.00	\$245,000.00	33	0
84-B-0684	THOMFEDN C	Y		\$245,000.00	\$24,000.00	\$245,000.00	176	43
84-B-0684	THU COMFA	Y		\$21,650.00	\$24,000.00	\$45,360.00	119	14
84-B-0727	HUFF ENTER	Y		\$155,000.00	\$805,600.00	\$340,750.00	-23	34
84-B-0727	J KOKOLAKI	Y		\$1,052,112.00	\$605,600.00	\$340,750.00	75	212
84-B-0727	JENNING CO	Y		\$760,000.00	\$605,600.00	\$340,750.00	25	129
84-B-0727	MARANGOS C	Y		\$658,000.00	\$605,600.00	\$340,750.00	-1	75
84-B-0727	NASSEAU ROC	Y		\$145,000.00	\$605,600.00	\$340,750.00	-27	28
84-B-0727	NATIONAL R	Y		\$422,725.00	\$605,600.00	\$340,750.00	-29	27
84-B-0727	QUALITY RC	Y		\$655,711.00	\$605,600.00	\$340,750.00	15	104
84-B-0727	TRID CONET	Y		\$550,000.00	\$605,600.00	\$340,750.00	-4	70
84-B-0727	VIENNA CO	Y		\$340,750.00	\$605,600.00	\$340,750.00	-44	0
84-B-0731	E.S. McCARE	Y		\$552,750.00	\$385,000.00	\$567,000.00	54	5
84-B-0731	NEWRICH CO	Y		\$620,500.00	\$385,000.00	\$567,000.00	61	9
84-B-0731	RICHARD M.	Y		\$527,000.00	\$385,000.00	\$567,000.00	47	0
84-B-0733	LINCOLN CO	Y		\$336,469.00	\$342,056.00	\$336,469.00	-2	0
84-B-4731	MAGNIM INC	Y		\$432,365.00	\$373,218.34		30	ERROR
84-B-4731	RIFFER INC	Y		\$473,721.00	\$373,218.34		27	ERROR
84-B-4731	SALVATORE	Y		\$629,843.00	\$373,218.34		66	ERROR
84-B-5887	ATHAN CORP	Y		\$417,000.00	\$437,242.00		-5	ERROR
84-B-5887	BRUNG CP I	Y		\$658,874.00	\$437,242.00		28	ERROR
84-B-5887	HARVEST BE	Y		\$405,700.00	\$437,242.00		7	ERROR
84-B-5887	JOHN D DON	Y		\$343,574.00	\$437,242.00		-20	ERROR
84-B-5887	PIONEER CO	Y		\$364,000.00	\$437,242.00		-12	ERROR
84-B-5887	REE CONET	Y		\$393,626.00	\$437,242.00		-12	ERROR
84-B-5887	THE WILTON	Y		\$336,000.00	\$437,242.00		-23	ERROR
84-B-5887	L S WHITE	Y		\$375,757.00	\$437,242.00		32	ERROR
84-B-5887	DANLADI CO	Y	N	\$423,000.00	\$437,242.00		-3	ERROR



CONTRACT#	OFFEROR	SS	S D B	BID	GOVT EST	AWARD PRICE	% OF GOV'	% OF AWA
84-E-6658	AUTOMATED	N		\$89,591.00	\$44,000.00		104	ERROR
84-E-6658	AUTOMATED	N		\$99,591.00	\$44,000.00		104	ERROR
84-B-6658	CENTURY AU	Y		\$87,500.00	\$44,000.00		99	ERROR
84-E-6658	GLOBAL FIR	N		\$76,421.00	\$44,000.00		74	ERROR
84-E-6658	H.V. ALLEN	Y		\$64,400.00	\$44,000.00		115	ERROR
84-R-0517	ALEX MUNDZ	?	Y	\$2,363,000.00	\$1,720,000.00	\$1,388,600.00	37	25
84-R-0517	C F MOORE	?	Y	\$2,214,423.00	\$1,720,000.00	\$1,388,600.00	29	17
84-R-0517	COMSTOCK	?	Y	\$2,320,118.00	\$1,720,000.00	\$1,388,600.00	64	49
84-R-0517	GYRANID	?	Y	\$1,888,600.00	\$1,720,000.00	\$1,388,600.00	10	0
84-R-0517	UEM INC	?	Y	\$2,078,804.00	\$1,720,000.00	\$1,388,600.00	21	10
85-B-0003	A.P. ELECT	Y		\$256,510.00	\$269,753.00	\$266,800.00	-5	-4
85-B-0003	BCI CONSTR	Y		\$266,800.00	\$269,753.00	\$266,800.00	-1	0
85-B-0003	H T H. ABS	Y		\$333,750.00	\$269,753.00	\$266,800.00	42	44
85-B-0003	RIVEFEA CO	Y		\$266,724.00	\$269,753.00	\$266,800.00	6	7
85-E-0003	SOOPFEET C	Y		\$323,188.00	\$269,753.00	\$266,800.00	22	23
85-B-0003	STAFM GRAFT	Y		\$296,168.00	\$269,753.00	\$266,800.00	6	7
85-B-0003	T-EPMD CON	Y		\$304,111.00	\$269,753.00	\$266,800.00	13	14
85-B-0007	GAFFNEY CO	Y		\$119,000.00	\$90,000.00	\$119,000.00	32	0
85-B-0007	J W LISTER	Y		\$108,740.00	\$90,000.00	\$119,000.00	43	8
85-B-0012	BAFLON CON	?		\$130,400.00	\$3,116,400.00		-96	ERROR
85-B-0012	J S MASIN	Y		\$121,000.00	\$3,116,400.00		-96	ERROR
85-B-0013	BILL STREN	Y		\$2,848,416.00	\$1,400,000.00		100	ERROR
85-B-0013	J C N CONS	Y		\$2,241,000.00	\$1,400,000.00		60	ERROR
85-B-0014	C R KLEWIN	?		\$5,664,389.00	\$5,116,320.00	\$4,924,000.00	11	16
85-B-0014	CALAHOUNT	Y		\$6,670,000.00	\$5,116,320.00	\$4,924,000.00	30	35
85-B-0014	CARLIN CON	?		\$4,924,000.00	\$5,116,320.00	\$4,924,000.00	-4	0
85-B-0014	J L MARSHA	?		\$6,668,000.00	\$5,116,320.00	\$4,924,000.00	15	24
85-B-0014	J S MASIN	Y		\$5,396,000.00	\$5,116,320.00	\$4,924,000.00	5	3
85-B-0014	PEABODY CO	?		\$6,432,000.00	\$5,116,320.00	\$4,924,000.00	26	31
85-B-0015	GAFFNEY CO	Y		\$2,159,352.00	\$889,360.00	\$1,028,000.00	147	102
85-B-0015	J.C.N CONS	Y		\$1,466,000.00	\$889,360.00	\$1,028,000.00	65	35
85-B-0015	MARTIN J.	Y		\$1,440,000.00	\$889,360.00	\$1,028,000.00	62	32
85-B-0029	BILL STREN	Y		\$6,485,000.00	\$6,704,275.00		-3	ERROR
85-B-0029	SWEFCD COR	Y		\$7,601,756.00	\$6,704,275.00		13	ERROR
85-B-0029	TRATARTOS	Y		\$7,675,000.00	\$6,704,275.00		14	ERROR
85-B-0029	TEXAS CAPI	Y		\$6,795,000.00	\$6,704,275.00		1	ERROR
85-B-0036	CONTR GROU	Y		\$3,542,315.00	\$3,645,800.00		-3	ERROR
85-B-0036	B L FOULIN	Y		\$3,392,345.00	\$3,645,800.00		-9	ERROR
85-B-0036	DAVIS & HA	Y		\$3,119,491.00	\$3,645,800.00		-14	ERROR
85-B-0036	H E CALLAH	Y		\$3,086,914.00	\$3,645,800.00		-16	ERROR
85-B-0036	JCM CONST	Y		\$5,211,000.00	\$3,645,800.00		40	ERROR
85-B-0036	JCN CONSTR	Y		\$4,470,000.00	\$3,645,800.00		23	ERROR
85-B-0036	PLACEWAY C	Y		\$3,024,000.00	\$3,645,800.00		-17	ERROR
85-B-0036	SHOSTAL	Y		\$3,495,044.00	\$3,645,800.00		-5	ERROR
85-B-0036	TRATARTOS	Y		\$4,596,600.00	\$3,645,800.00		17	ERROR
85-B-0045	CAPALDI BR	Y		\$2,552,756.00	\$1,641,518.00	\$2,460,000.00	56	4
85-E-0045	CONST ENG	Y		\$3,521,341.00	\$1,641,518.00	\$2,460,000.00	115	43
85-B-0045	G ERIGO C	Y		\$2,460,000.00	\$1,641,518.00	\$2,460,000.00	50	0
85-B-0045	HUGO KEY &	Y		\$1,795,247.00	\$1,641,518.00	\$2,460,000.00	7	-23
85-E-0045	SLERCO COR	Y		\$1,551,000.00	\$1,641,518.00	\$2,460,000.00	56	4
85-B-0059	ANGELD'S C	Y		\$264,000.00	\$245,225.00	\$264,000.00	8	0
85-B-0059	BOND ELEC	?		\$113,106.00	\$245,225.00	\$264,000.00	-54	-57



CONTRACT#	OFFEROR	SE	S.D.B	BID	GOVT EST	AWARD PRICE	%OF GOVT	% OF AWD
85-B-0059	KEM CONSTR	Y		\$457,630.00	\$245,225.00	\$264,000.00	87	73
85-B-0059	PEROSI BRO	Y		\$344,776.00	\$245,225.00	\$254,000.00	41	31
85-B-0062	AMERICAN C	Y		\$273,267.00	\$120,228.00	\$273,749.00	12	28
85-B-0062	BELL STROM	Y		\$236,229.00	\$120,228.00	\$273,749.00	-6	5
85-B-0062	DANLADI CO	Y		\$984,000.00	\$420,228.00	\$273,749.00	53	63
85-B-0062	HUTCHINSON	Y		\$384,889.00	\$420,228.00	\$273,749.00	-8	3
85-B-0062	M & M SERV	Y		\$623,953.00	\$420,228.00	\$273,749.00	49	67
85-B-0062	RANCO CONS	Y		\$172,000.00	\$420,228.00	\$273,749.00	12	26
85-B-0062	RAY ANGELI	Y		\$144,000.00	\$420,228.00	\$273,749.00	6	19
85-B-0062	SAN LUCAS	Y		\$373,749.00	\$420,228.00	\$273,749.00	-11	0
85-B-0062	TAYLOR MOB	Y		\$483,000.00	\$420,228.00	\$273,749.00	15	29
85-B-0062	TITAN CONS	Y		\$682,000.00	\$420,228.00	\$273,749.00	55	65
85-B-0070	ADVANCED M	Y		\$1,455,597.00	\$767,000.00	\$145,597.00	90	89
85-B-0070	MAGNUM INC	Y		\$1,497,000.00	\$767,000.00	\$145,597.00	95	99
85-B-0070	STRUCTURAL	Y		\$1,914,850.00	\$767,000.00	\$145,597.00	150	1215
85-B-0075	ARNOLD M D	Y		\$1,710,427.00	\$1,316,730.00		30	EFRCR
85-B-0075	CARLIN CON	Y		\$1,568,205.00	\$1,316,730.00	\$1,064,344.00	27	54
85-B-0075	JAMES J O'	Y		\$1,958,657.00	\$1,316,730.00	\$1,064,344.00	43	21
85-B-0075	PLACEWAY C	?		\$1,826,000.00	\$1,316,730.00	\$1,064,344.00	39	68
85-B-0075	SWEPCO COR	Y		\$1,938,000.00	\$1,316,730.00	\$1,064,344.00	40	70
85-B-0075	THAMROCK A	Y		\$1,830,500.00	\$1,316,730.00	\$1,064,344.00	39	69
85-B-0078	A.B. COCHR	Y		\$5,557,000.00	\$5,210,738.00	\$4,928,714.00	-11	13
85-B-0078	DOVID ENGI	Y		\$5,497,800.00	\$5,210,738.00	\$4,928,714.00	-11	12
85-B-0078	DUNLOP & C			\$4,928,714.00	\$5,210,738.00	\$4,928,714.00	-21	0
85-B-0078	FORCE CONS			\$5,698,800.00	\$5,210,738.00	\$4,928,714.00	-8	16
85-B-0078	GENDRY CON			\$5,297,000.00	\$5,210,738.00	\$4,928,714.00	-15	7
85-B-0078	GOHEEN G C	Y		\$5,820,000.00	\$5,210,738.00	\$4,928,714.00	-14	6
85-B-0078	HOWARD W.			\$6,260,750.00	\$5,210,738.00	\$4,928,714.00	1	27
85-B-0078	IND CONTRA	Y		\$6,345,000.00	\$5,210,738.00	\$4,928,714.00	2	29
85-B-0078	LICHTEFELD	Y		\$5,250,000.00	\$5,210,738.00	\$4,928,714.00	-15	7
85-B-0078	STRUCK G	Y		\$5,245,800.00	\$5,210,738.00	\$4,928,714.00	-16	6
85-B-0078	TRAYLER BR	Y		\$5,587,889.00	\$5,210,738.00	\$4,928,714.00	-10	13
85-B-0078	WEDDLE BRO	Y		\$5,365,000.00	\$5,210,738.00	\$4,928,714.00	-14	9
85-B-0078	BLINDERMAN	Y		\$5,708,054.00	\$5,260,750.00	\$4,928,714.00	-9	16
85-B-0091	ROBERT J S	Y		\$1,533,500.00	\$552,105.00		79	EFRCR
85-B-0094	ALFRED J F	Y		\$31,750.00	\$57,700.00		42	EFRCR
85-B-0094	CARR & DUF	Y		\$93,450.00	\$57,700.00		52	EFRCR
85-B-0094	KIRK BROS	Y		\$29,500.00	\$57,700.00		55	EFRCR
85-B-0094	KUBIAK ELE	Y		\$88,374.00	\$57,700.00		20	EFRCR
85-B-0094	NICERO ELE	Y		\$94,400.00	\$57,700.00		64	EFRCR
85-B-0094	PHILLIPS B	Y		\$71,710.00	\$57,700.00		24	EFRCR
85-B-0094	RAY ANGELI	Y		\$93,000.00	\$57,700.00		61	EFRCR
85-B-0090	A.F. LUSI	N		\$5,847,000.00	\$7,000,000.00	\$6,847,000.00	-2	0
85-B-0090	JLT CONST	N		\$6,997,000.00	\$7,000,000.00	\$6,847,000.00	-0	2
85-B-0091	IRRIGATION	Y		\$111,997.00	\$172,800.00		-37	EFRCR
85-B-0091	HALDRAN &	Y		\$114,800.00	\$172,800.00		-36	EFRCR
85-B-0091	TERRY'S CO	Y		\$160,000.00	\$172,800.00		-11	EFRCR
85-B-0093	CHARLES CO	Y		\$4,809,000.00	\$4,575,659.00	\$4,909,000.00	5	0
85-B-0093	J.C.N CONS	Y		\$6,344,000.00	\$4,575,559.00	\$4,809,000.00	39	82
85-B-0101	HALDIN	Y		\$269,485.00	\$152,553.00	\$289,485.00	2	0
85-B-0101	HAMMITT CO	Y		\$125,000.00	\$282,853.00	\$289,485.00	50	47
85-B-0101	INDUSTRIAL	Y		\$347,200.00	\$282,853.00	\$289,485.00	13	20



CONTRACT#	OFFEROR	SB	S.D.B	BID	GOVT EST	AWARD PRICE	%OF GOV'	% OF AGR
85-B-0114	AMERICAN H	Y		\$387,600.00	\$454,000.00		-15	ERROR
85-B-0114	KIRK ERIC	Y		\$487,400.00	\$454,000.00		-15	ERROR
85-B-0114	REITER CON	Y		\$397,000.00	\$454,000.00		-13	ERROR
85-B-0114	UNITED ESE	Y		\$347,643.00	\$454,000.00		-23	ERROR
85-B-0134	CHARLES CO	N		\$9,899,000.00	\$8,543,300.00	\$9,180,000.00	16	0
85-B-0134	HARVEY CON	N		\$9,160,000.00	\$8,543,300.00	\$9,180,000.00	7	0
85-B-0134	JEFFERSON	N		\$9,181,000.00	\$8,543,300.00	\$9,180,000.00	8	0
85-B-0134	PEABODY CO	N		\$6,814,000.00	\$8,543,300.00	\$9,180,000.00	15	7
85-B-0148	ARROW FENC	Y		\$882,277.00	\$1,055,045.00	\$468,972.00	-16	88
85-E-0148	E S McCARE	Y		\$667,000.00	\$1,055,045.00	\$468,972.00	-37	42
85-B-0148	BUTLER FEN	Y		\$524,845.00	\$1,055,045.00	\$468,972.00	-50	12
85-B-0148	COLLINSON	Y		\$454,740.00	\$1,055,045.00	\$468,972.00	-53	5
85-B-0148	CROWLEY CO	Y		\$773,200.00	\$1,055,045.00	\$468,972.00	-27	65
85-B-0148	DEESE CONS	Y		\$687,000.00	\$1,055,045.00	\$468,972.00	-38	40
85-B-0148	RELIANCE F	Y		\$584,000.00	\$1,055,045.00	\$468,972.00	-45	25
85-B-0148	ROGERS FEN	?		\$468,972.00	\$1,055,045.00	\$468,972.00	-56	0
85-B-0148	THE ROME I	Y		\$494,000.00	\$1,055,045.00	\$468,972.00	-53	5
85-B-0148	ARROW FENC	Y	?	\$582,277.00	\$1,055,045.00	\$468,972.00	-16	88
85-E-0148	E S. McCAR	Y	?	\$667,000.00	\$1,055,045.00	\$468,972.00	-37	42
85-B-0148	BUTLER FEN	Y	?	\$524,845.00	\$1,055,045.00	\$468,972.00	-50	12
85-B-0148	COLLINSON	Y	?	\$494,740.00	\$1,055,045.00	\$468,972.00	-53	5
85-B-0148	CROWLEY CO	Y	?	\$773,200.00	\$1,055,045.00	\$468,972.00	-27	65
85-B-0148	DEESE CONS	?	?	\$687,000.00	\$1,055,045.00	\$468,972.00	-38	40
85-E-0148	RELIANCE F	Y	?	\$584,000.00	\$1,055,045.00	\$468,972.00	-45	25
85-B-0148	THE ROME I	Y	?	\$494,000.00	\$1,055,045.00	\$468,972.00	-53	5
85-B-0148	ROGERS FEN	Y	N	\$298,972.00	\$1,055,045.00	\$468,972.00	-56	0
85-B-0152	B. S. McCa	Y		\$979,000.00	\$900,000.00	\$979,000.00	9	0
85-B-0152	NATIONAL E	Y		\$1,490,000.00	\$900,000.00	\$979,000.00	66	52
85-B-0152	FENSHAW BA	Y		\$986,300.00	\$900,000.00	\$979,000.00	10	1
85-B-0152	RICHARD M.	Y		\$993,000.00	\$900,000.00	\$979,000.00	11	2
85-B-0152	STRUCTURAL	Y		\$1,007,007.00	\$900,000.00	\$979,000.00	12	3
85-B-0155	ANCO CONS	Y		\$102,000.00	\$73,000.00	\$87,800.00	40	15
85-B-0155	CEASAR CON	Y		\$95,000.00	\$73,000.00	\$87,800.00	30	8
85-B-0155	FARINELLI	Y		\$97,600.00	\$73,000.00	\$87,800.00	20	0
85-B-0155	MARTELL CO	Y		\$191,100.00	\$73,000.00	\$87,800.00	111	75
85-B-0160	PHA, INC.	Y		\$257,255.00	\$196,700.00	\$257,255.00	31	0
85-B-0160	POLARIS CO	Y		\$266,582.39	\$196,700.00	\$257,255.00	36	4
85-B-0167	GABEEN CON	Y		\$3,056,450.00	\$4,137,000.00		-25	ERROR
85-B-0167	LICHTEFELD	Y		\$3,143,250.00	\$4,137,000.00		-24	ERROR
85-B-0167	KREMPP LUM	Y		\$3,200,500.00	\$4,137,000.00		-23	ERROR
85-B-0167	DUNLAP & C	Y		\$3,384,750.00	\$4,137,000.00		-19	ERROR
85-B-0167	DAVID ENG	Y		\$3,956,525.00	\$4,137,000.00		-19	ERROR
85-B-0167	TRAIFOR ER	Y		\$3,375,000.00	\$4,137,000.00		-18	ERROR
85-B-0167	GLEN ROY C	Y		\$3,442,400.00	\$4,137,000.00		-17	ERROR
85-B-0167	WEDDLE BRO	Y		\$3,444,500.00	\$4,137,000.00		-17	ERROR
85-B-0167	LENFY LUMB	Y		\$3,516,303.00	\$4,137,000.00		-15	ERROR
85-B-0167	RIVERA-COT	Y		\$3,558,506.00	\$4,137,000.00		-14	ERROR
85-B-0169	JAM OXLEY	Y		\$742,125.00	\$650,664.00		-13	ERROR
85-B-0169	BEATY CONS	Y		\$618,700.00	\$650,664.00		-4	ERROR
85-B-0169	MAC CONSTR	Y		\$1,141,000.00	\$650,664.00		34	ERROR
85-B-0169	W.D. EARTL	Y		\$718,900.00	\$650,664.00		-15	ERROR
85-B-0169	WINLOW CO	Y		\$731,200.00	\$650,664.00		-7	ERROR



CONTRACT#	OFFEROR	SB	S D E	BID	GOVT EST	AWARD PRICE	% OF GOV	% OF AWA
85-B-0180	AMERICAN C	Y		\$1,795,448.00	\$2,130,104.00	\$1,795,448.00	-20	-6
85-B-0180	J C N CONS	Y		\$3,084,000.00	\$2,130,104.00	\$1,795,448.00	45	72
85-B-0180	D L FOULIN	Y		\$8,000,000.00	\$2,130,104.00	\$1,795,448.00	323	491
85-B-0181	R.J. DELMO	Y		\$276,306.02	\$249,082.00	\$276,306.00	11	0
85-B-0185	A.P. WHITA	Y		\$274,000.00	\$164,096.00	\$199,885.00	67	37
85-B-0185	D.L. POWLI	Y		\$246,000.00	\$164,096.00	\$199,885.00	50	23
85-B-0185	HAMMITT CO	Y		\$214,000.00	\$164,096.00	\$199,885.00	30	7
85-B-0185	LYBURN	Y		\$322,100.00	\$164,096.00	\$199,885.00	36	61
85-B-0185	OLD TOWN A	Y		\$199,885.00	\$164,096.00	\$199,885.00	22	0
85-B-0185	FRAUGHT CO	Y		\$265,500.00	\$164,096.00	\$199,885.00	62	33
85-B-0189	TRI STATE	Y		\$2,353,000.00	\$1,619,408.00		45	ERROR
85-B-0189	ACME CONST	Y		\$2,588,500.00	\$1,619,408.00		57	ERROR
85-B-0189	FLETCHER-H	Y		\$2,583,598.00	\$1,619,408.00		65	ERROR
85-B-0189	DANLADI	Y		\$2,675,000.00	\$1,619,408.00		65	ERROR
85-B-0193	P.J. STELL	Y		\$8,401,200.00	\$6,600,000.00		27	ERROR
85-B-0193	EASTERN CO	Y		\$8,400,000.00	\$6,600,154.00		27	ERROR
85-B-0195	M.J. SIMKO	Y		\$1,030,000.00	\$852,478.00		21	ERROR
85-B-0195	MIDDLESEX	Y		\$978,000.00	\$852,478.00		15	ERROR
85-B-0195	MOORES & N	Y		\$1,024,999.00	\$852,478.00		20	ERROR
85-B-0195	FRAUGHT CO	Y		\$1,245,000.00	\$852,478.00		46	ERROR
85-B-0196	A.G.M. MAR	--		\$36,000.00	\$41,000.00	\$67,654.00	134	42
85-B-0196	ATLANTIS-C	Y		\$67,654.00	\$41,000.00	\$67,654.00	65	0
85-B-0196	EAST COAST	--		\$88,516.00	\$41,000.00	\$67,654.00	-5	-43
85-B-0196	J.M. CASHM	Y		\$89,500.00	\$41,000.00	\$67,654.00	116	31
85-B-0196	REV-LYN CO	Y		\$75,000.00	\$41,000.00	\$67,654.00	83	11
85-B-0196	SOLIMANCO	Y		\$116,900.00	\$41,000.00	\$67,654.00	185	73
85-B-0199	HEARTH HTG	Y		\$972,000.00	\$1,059,000.00	\$847,000.00	-9	-15
85-B-0199	LOTT ELECT	Y		\$847,000.00	\$1,059,000.00	\$847,000.00	-20	0
85-B-0199	VISION DAT	?		\$0.00	\$1,059,000.00	\$847,000.00	-100	-100
85-B-0302	POSTPONED	Y					ERROR	ERROR
85-B-0313	MARTELL CO	Y		\$347,000.00	\$191,200.00	\$343,000.00	91	1
85-B-0313	PHA, INC	--		\$343,000.00	\$191,200.00	\$343,000.00	79	0
85-B-0313	DANLADI CO	Y	Y	\$423,000.00	\$191,200.00	\$343,000.00	121	23
85-B-0316	-LIE CONST	?		\$1,058,600.00	\$717,000.00	\$784,000.00	46	35
85-B-0316	-RNER-LIND	Y		\$1,054,500.00	\$717,000.00	\$784,000.00	47	35
85-B-0316	ARTCO CONT	Y		\$924,372.00	\$717,000.00	\$784,000.00	29	18
85-B-0316	BARTON & B	?		\$1,000,000.00	\$717,000.00	\$784,000.00	39	28
85-B-0316	ELGIN BLDR	Y		\$875,000.00	\$717,000.00	\$784,000.00	22	12
85-B-0316	FERNDALE E	?		\$119,958.00	\$717,000.00	\$784,000.00	-88	-95
85-B-0316	FILKER CON	?		\$1,200,000.00	\$717,000.00	\$784,000.00	67	53
85-B-0316	G.D. LEWIS	Y		\$784,000.00	\$717,000.00	\$784,000.00	9	0
85-B-0316	RELIANCE B	Y		\$1,000,000.00	\$717,000.00	\$784,000.00	39	28
85-B-0316	SCHILLER C	Y		\$887,900.00	\$717,000.00	\$784,000.00	24	13
85-B-0316	SITE DEVEL	Y		\$953,000.00	\$717,000.00	\$784,000.00	35	24
85-B-0324	EUGENE RIC	Y		\$89,890.00	\$37,370.00	\$61,000.00	141	47
85-B-0324	H.V. ALLEN	Y		\$61,000.00	\$37,370.00	\$61,000.00	53	0
85-B-0329	BARTON & B	Y		\$1,000,000.00	\$380,100.00	\$464,587.00	163	115
85-B-0329	ELGIN BUIL	Y		\$611,300.00	\$380,100.00	\$464,587.00	61	32
85-B-0329	FARVIEW CO	Y		\$654,360.00	\$380,100.00	\$464,587.00	72	41
85-B-0329	FILKER CON	Y		\$650,000.00	\$380,100.00	\$464,587.00	71	40
85-B-0329	PARKWOOD C	Y		\$495,787.00	\$380,100.00	\$464,587.00	30	7
85-B-0329	R.W. EDGAR	Y		\$571,500.00	\$380,100.00	\$464,587.00	50	23



CONTRACT#	OFFEROR	SP	S.D.E	BID	GOV'T EST	AWARD PRICE	% OF GOV'	% OF AWA
85-B-0323	SITE DEVEL	Y		\$640,500.00	\$380,100.00	\$464,567.00	69	58
85-B-0343	PIPING SYS	Y		\$65,933.00	\$101,000.00	\$69,933.00	-31	0
85-B-0343	TEMFOD INC	Y		\$77,200.00	\$101,000.00	\$69,933.00	-24	10
85-B-0343	CAM A/C L	Y		\$113,323.00	\$101,000.00	\$69,933.00	12	62
85-B-0343	CONDITIONA	Y		\$114,400.00	\$101,000.00	\$69,933.00	13	64
85-B-0343	BOOM BINDER	Y		\$132,976.00	\$101,000.00	\$69,933.00	33	92
85-B-0343	D DIXON DO	Y		\$139,650.00	\$101,000.00	\$69,933.00	39	100
85-B-0343	HAMMITT CO	Y		\$147,000.00	\$101,000.00	\$69,933.00	26	110
85-B-0382	BIA MARINE	Y		\$363,840.00	\$315,663.00	\$209,000.00	17	77
85-B-0382	EAY WELDIN	Y		\$912,500.00	\$315,663.00	\$209,000.00	-1	50
85-B-0382	ERIM CONTR	Y		\$850,000.00	\$315,663.00	\$209,000.00	11	67
85-B-0382	CENTRAL ME	Y		\$162,000.00	\$315,663.00	\$209,000.00	-17	25
85-B-0382	CLIMATECH	Y		\$244,000.00	\$315,663.00	\$209,000.00	3	65
85-B-0382	DIERR'S HTG	Y		\$307,000.00	\$315,663.00	\$209,000.00	-3	47
85-B-0382	F & H PLNG	Y		\$525,500.00	\$315,663.00	\$209,000.00	66	151
85-B-0382	I.C. EQUIP	Y		\$321,000.00	\$315,663.00	\$209,000.00	2	54
85-B-0382	LAFATA COF	Y		\$352,240.00	\$315,663.00	\$209,000.00	12	69
85-B-0382	M.G. SЛИВК	Y		\$264,600.00	\$315,663.00	\$209,000.00	-16	27
85-B-0382	MARIC MECH	Y		\$360,000.00	\$315,663.00	\$209,000.00	14	72
85-B-0382	MICHAEL C.	Y		\$397,400.00	\$315,663.00	\$209,000.00	26	90
85-B-0382	R. MARIC F	Y		\$324,000.00	\$315,663.00	\$209,000.00	3	55
85-B-0382	RAY-KAY IN	Y		\$188,000.00	\$315,663.00	\$209,000.00	-9	38
85-B-0382	SCOEKNE & S	Y		\$245,700.00	\$315,663.00	\$209,000.00	-21	19
85-B-0382	STATE MECH	Y		\$464,000.00	\$315,663.00	\$209,000.00	47	122
85-B-0382	STEVEN'S T	Y		\$205,000.00	\$315,663.00	\$209,000.00	-34	0
85-B-0382	V & Z FLBG	Y		\$287,914.00	\$315,663.00	\$209,000.00	-9	37
85-B-0403	APEL VEIDE	Y		\$193,000.00	\$138,829.00	\$125,500.00	39	54
85-B-0403	COOLING CO	Y		\$242,588.00	\$138,829.00	\$125,500.00	75	93
85-B-0403	COTTMAN ME	Y		\$238,100.00	\$138,829.00	\$125,500.00	72	90
85-B-0403	DOLAN MECH	Y		\$183,780.00	\$138,829.00	\$125,500.00	-4	7
85-B-0403	KIRK BROTH	Y		\$195,800.00	\$138,829.00	\$125,500.00	44	59
85-B-0403	KOHLER BRO	Y		\$125,500.00	\$138,829.00	\$125,500.00	-10	0
85-B-0403	MECHANICAL	Y		\$168,879.00	\$138,829.00	\$125,500.00	22	35
85-B-0403	NORTH AMER	Y		\$243,000.00	\$138,829.00	\$125,500.00	75	94
85-B-0403	SCHAFFER E	Y		\$162,971.00	\$138,829.00	\$125,500.00	17	30
85-B-0418	ABEL & HES	Y		\$129,900.00	\$133,000.00	\$86,999.00	-2	49
85-B-0418	CRISCELLE	Y		\$145,500.00	\$133,000.00	\$86,999.00	12	72
85-B-0418	GUARDIAN C	Y		\$128,279.00	\$133,000.00	\$86,999.00	-4	47
85-B-0418	HORN BROTH	Y		\$174,800.00	\$133,000.00	\$86,999.00	31	101
85-B-0418	J YONIDARI	Y		\$152,660.00	\$133,000.00	\$86,999.00	15	75
85-B-0418	JJ MORRIS	Y		\$88,898.00	\$133,000.00	\$86,999.00	-26	14
85-B-0418	LIBERTY BE	Y		\$66,950.00	\$133,000.00	\$86,999.00	-35	0
85-B-0418	LYBURN CON	Y		\$221,000.00	\$133,000.00	\$86,999.00	66	154
85-B-0418	ROCTOM INC	Y		\$118,000.00	\$133,000.00	\$86,999.00	-11	36
85-B-0425	A P ELEC C	Y		\$161,052.00	\$93,000.00	\$145,000.00	73	11
85-B-0425	GAUDELLI B	?		\$189,000.00	\$93,000.00	\$145,000.00	103	30
85-B-0425	NIEO CONST	Y		\$161,543.00	\$93,000.00	\$145,000.00	95	25
85-B-0425	TAMRE CONC	Y		\$219,000.00	\$93,000.00	\$145,000.00	135	51
85-B-0425	UNITED CON	Y		\$145,000.00	\$93,000.00	\$145,000.00	56	0
85-B-0426	LOTT GROUP	Y		\$18,200.00	\$220,113.00	\$182,000.00	-92	-30
85-B-0426	HAMPTON BE	Y		\$362,800.00	\$220,113.00	\$182,000.00	65	95
85-B-0426	UNITED CON	Y		\$21,800.00	\$220,113.00	\$182,000.00	-90	-13



CONTRACT#	OFFEROR	SB	S.D.B	BID	GOV'T EST	AWARD PRICE	% OF GOV'	% OF AWA
85-B-0426	MAGNUM INC	Y		\$643,568.00	\$220,113.00	\$182,000.00	56	89
85-B-0426	UN F. GAVI	Y		\$884,645.00	\$220,113.00	\$182,000.00	75	111
85-B-0428	CUALL INC	Y		\$378,888.00	\$304,361.00		24	ERROR
85-B-0429	LANE CO.	Y		\$277,000.00	\$304,361.00		-9	ERROR
85-B-0428	MARTELL CO	Y		\$303,600.00	\$304,361.00		11	ERROR
85-B-0429	MCALLISTER	Y		\$197,000.00	\$159,258.00	\$197,000.00	24	0
85-B-0429	MCMULLEN P	Y		\$269,700.00	\$159,258.00	\$197,000.00	69	37
85-B-0430	ROLAND W	Y		\$224,399.00	\$195,771.00	\$224,399.00	15	0
85-B-0436	ATHAN CONS	Y		\$594,000.00	\$682,100.00	\$727,841.00	-13	-16
85-B-0436	DAVISVILLE	Y		\$727,841.00	\$682,100.00	\$727,841.00	7	0
85-B-0436	MARTELL CO	Y		\$686,700.00	\$682,100.00	\$727,841.00	30	22
85-B-0436	MCALISTER	Y		\$937,517.00	\$682,100.00	\$727,841.00	37	29
85-B-0436	MCMULLEN R	Y		\$814,132.00	\$682,100.00	\$727,841.00	16	12
85-B-0436	MILD CONST	Y		\$1,180,967.00	\$682,100.00	\$727,841.00	73	62
85-B-0436	FRATON CON	Y		\$864,450.00	\$682,100.00	\$727,841.00	27	19
85-B-0436	R. WIIBAND	Y		\$748,430.00	\$682,100.00	\$727,841.00	10	3
85-B-0436	S. KANE &	Y		\$1,169,000.00	\$682,100.00	\$727,841.00	71	61
85-B-0436	DANHLADI CO	Y	Y	\$943,000.00	\$682,100.00	\$727,841.00	38	30
85-B-0437	ATHAN CONTR	Y		\$438,000.00	\$595,300.00	\$438,000.00	-26	0
85-B-0437	B M DELTA	Y		\$483,711.00	\$595,300.00	\$438,000.00	-19	10
85-B-0437	GROVE ROOF	Y		\$467,736.00	\$595,300.00	\$438,000.00	-21	7
85-B-0437	J KOKOLAKI	Y		\$597,600.00	\$795,300.00	\$438,000.00	0	36
85-B-0437	MARTELL CO	Y		\$578,600.00	\$595,300.00	\$438,000.00	-3	32
85-B-0437	MERIS CONS	Y		\$730,600.00	\$595,300.00	\$438,000.00	23	67
85-B-0437	NINO CONTR	Y		\$756,646.00	\$595,300.00	\$438,000.00	27	73
85-B-0437	PAN BUILDI	Y		\$648,000.00	\$595,300.00	\$438,000.00	-9	49
85-B-0437	PIONEER CO	Y		\$448,000.00	\$595,300.00	\$438,000.00	-26	1
85-B-0437	PIRES CONS	Y		\$440,300.00	\$595,300.00	\$438,000.00	-16	1
85-B-0437	PRUTON CON	Y		\$562,460.00	\$595,300.00	\$438,000.00	-11	22
85-B-0438	STAR BRITE	Y		\$526,150.00	\$595,300.00	\$438,000.00	-11	21
85-B-0438	CONDITIONE	Y		\$19,738.00	\$24,969.00	\$19,738.00	-21	0
85-B-0438	CONDITIONE	Y		\$19,738.00	\$24,969.00	\$19,738.00	-21	0
85-B-0438	HAMMITT CO	Y		\$29,200.00	\$24,969.00	\$19,738.00	17	48
85-B-0438	HAMMITT CO	Y		\$29,200.00	\$24,969.00	\$19,738.00	17	48
85-B-0438	MERRITT CO	Y		\$39,000.00	\$24,969.00	\$19,738.00	56	98
85-B-0438	MERRITT CO	Y		\$39,000.00	\$24,969.00	\$19,738.00	56	98
85-B-0438	THE GEORGE	Y		\$72,899.00	\$24,969.00	\$19,738.00	-8	16
85-B-0438	THE GEORGE	Y		\$22,890.00	\$24,969.00	\$19,738.00	-8	16
85-B-0440	ATLANTIC B	Y		\$110,990.00	\$70,000.00		59	ERROR
85-B-0449	BELLS ROOF	Y		\$224,500.00	\$166,500.00	\$168,999.00	20	33
85-B-0449	DESIGN ROO	Y		\$183,000.00	\$166,500.00	\$168,999.00	1	11
85-B-0449	EAGLE CORN	Y		\$182,618.00	\$166,500.00	\$168,999.00	-2	8
85-B-0449	ED JAQUES	Y		\$149,495.00	\$166,500.00	\$168,999.00	-20	-12
85-B-0449	NEW LONDON	Y		\$168,999.00	\$166,500.00	\$168,999.00	-9	0
85-B-0449	FERMIERE I	Y		\$207,940.00	\$166,500.00	\$168,999.00	11	23
85-B-0449	T.L.T CONS	Y		\$197,000.00	\$166,500.00	\$168,999.00	6	17
85-B-0450	C F I CONS	Y		\$143,175.00	\$51,400.00		57	ERROR
85-B-0450	GEM BLDG I	Y		\$60,970.00	\$51,400.00		-33	ERROR
85-B-0450	MARON CONS	Y		\$68,850.00	\$51,400.00		-25	ERROR
85-B-0450	NEUMAN JDN	Y		\$64,969.00	\$51,400.00		-73	ERROR
85-B-0456	ATLANTIC B	Y		\$393,750.00	\$243,000.00	\$318,957.00	62	23
85-B-0455	CONSOLIDAT	Y		\$318,957.00	\$243,000.00	\$318,957.00	31	0



CONTRACT#	OFFEROR	SB	S-D-B	BID	GOV'T EST	AWARD PRICE	% OF GOV'	% OF AVG
85-E-0455	FRAUGHT CO	Y		\$383,000.00	\$243,000.00	\$318,957.00	53	20
85-E-0455	-----	Y	--	\$0.00	\$243,000.00	\$318,957.00	0	0
85-B-0456	MAGNUM INC	Y		\$303,914.00	\$187,400.00		62	ERROR
85-B-0457	DESIGN ROD	Y		\$193,600.00	\$237,500.00	\$198,800.00	-16	0
85-E-0457	EAGLE CORP	Y		\$200,040.00	\$237,500.00	\$198,800.00	-16	1
85-B-0457	ED JACQUES	Y		\$169,665.00	\$237,500.00	\$198,800.00	-29	-15
85-E-0457	PERIMERE I	Y		\$208,898.00	\$237,500.00	\$198,800.00	-12	5
85-E-0457	T.L.T CONS	Y		\$277,000.00	\$237,500.00	\$198,800.00	17	39
85-B-0461	CARMIC COR	Y		\$91,697.00	\$60,996.00	\$53,460.00	50	72
85-B-0461	DI FOCOS C	Y		\$86,445.00	\$60,996.00	\$53,460.00	53	80
85-B-0461	INDUSTRIAL	?		\$93,670.00	\$60,996.00	\$53,460.00	62	85
85-B-0461	LYNNMELL A	Y		\$114,956.00	\$60,996.00	\$53,460.00	88	118
85-B-0461	R T BETTER	Y		\$97,460.00	\$60,996.00	\$53,460.00	60	82
85-B-0461	TC ELECTRI	Y		\$93,460.00	\$60,996.00	\$53,460.00	-12	0
85-B-0461	VINCENT J	Y		\$59,440.00	\$60,996.00	\$53,460.00	-3	11
85-B-0472	GAFFNEY COR	Y		\$468,400.00	\$412,106.00	\$360,000.00	14	30
85-B-0472	K THOMPSON	Y		\$554,400.00	\$412,106.00	\$360,000.00	35	54
85-B-0472	MASTER MEC	Y		\$360,000.00	\$412,106.00	\$360,000.00	-13	0
85-B-0472	TECH & ENE	Y		\$792,000.00	\$412,106.00	\$360,000.00	32	120
85-B-0476	FONTAS CON	Y		\$653,370.00	\$682,000.00	\$704,580.00	-4	-7
85-B-0476	MCNULLEN R	Y		\$754,027.00	\$682,000.00	\$704,580.00	11	7
85-B-0476	PENN PERRY	Y		\$689,166.00	\$682,000.00	\$704,580.00	45	40
85-B-0476	PROTON CON	Y		\$745,450.00	\$682,000.00	\$704,580.00	3	6
85-B-0476	RD-MAR CON	Y		\$691,985.00	\$682,000.00	\$704,580.00	37	32
85-B-0476	WIGAND ROD	Y		\$729,476.00	\$682,000.00	\$704,580.00	6	3
85-B-0476	DAHLADI CO	Y	Y	\$1,092,300.00	\$682,000.00	\$704,580.00	60	55
85-E-0478	Arlington	Y	?	\$564,747.00	\$610,876.00	\$424,000.00	-8	33
85-E-0478	King Fiske	Y	?	\$424,000.00	\$610,876.00	\$424,000.00	-31	0
85-E-0478	Konica Ent	Y	?	\$525,210.00	\$610,876.00	\$424,000.00	-14	21
85-E-0478	Videolect C	Y	?	\$615,989.00	\$610,876.00	\$424,000.00	1	46
85-E-0545	AE&E & SVD	Y		\$461,910.00	\$276,000.00	\$196,161.00	67	195
85-E-0545	ABINGTON C	Y		\$198,431.00	\$276,000.00	\$196,161.00	-28	2
85-E-0546	BANKCROFT C	?		\$214,800.00	\$276,000.00	\$196,161.00	-22	10
85-B-0546	BLAKE COMP	Y		\$261,783.00	\$276,000.00	\$196,161.00	-5	34
85-B-0546	CENTRAL ST	Y		\$288,452.00	\$276,000.00	\$196,161.00	5	47
85-B-0546	D L FOULIN	Y		\$343,866.00	\$276,000.00	\$196,161.00	27	78
85-B-0546	EUGENE RIC	Y		\$277,840.00	\$276,000.00	\$196,161.00	1	42
85-B-0546	GAFFNEY CO	Y		\$291,000.00	\$276,000.00	\$196,161.00	5	48
85-B-0546	H V ALLEN	Y		\$247,000.00	\$276,000.00	\$196,161.00	-11	26
85-B-0546	HOLDEN BEF	?		\$267,189.00	\$276,000.00	\$196,161.00	-3	36
85-B-0546	IND WELDIN	Y		\$207,772.00	\$276,000.00	\$196,161.00	-25	6
85-B-0546	MERRIMACK	Y		\$322,500.00	\$276,000.00	\$196,161.00	17	64
85-B-0546	MIDDLESEX	Y		\$237,550.00	\$276,000.00	\$196,161.00	-14	21
85-B-0546	FRAUGHT CO	Y		\$254,000.00	\$276,000.00	\$196,161.00	7	50
85-B-0546	PROCESS EN	Y		\$298,234.00	\$276,000.00	\$196,161.00	-14	21
85-B-0546	STRUCTURAL	Y		\$271,400.00	\$276,000.00	\$196,161.00	-2	38
85-B-0546	WASHINGTON	Y		\$196,161.00	\$276,000.00	\$196,161.00	-29	0
85-B-0546	L A PROFEN	?		\$424,575.00	\$276,000.00	\$196,161.00	54	116
85-B-0619	GALYON CON	?		\$1,064,000.00	\$794,253.00	\$906,000.00	34	3
85-B-0619	VALQUEST CO	Y		\$177,500.00	\$794,253.00	\$906,000.00	-78	-62
85-B-0755	AMTRAC PAI	Y		\$973,846.71	\$750,000.00		30	ERROR
85-B-0755	ANNEXX FR	Y		\$375,110.26	\$750,000.00		17	ERROR



CONTRACT#	OFFEROR	SB	S.D.B	BID	GOV'T EST	AWARD PRICE	%GF gOV'	% OF AWA
85-B-0755	CENTRAL EN	Y		\$551,137.00	\$750,000.00		28	ERROR
85-B-0755	QUEEN CITY	Y		\$1,041,081.20	\$750,000.00		39	ERROR
85-E-0755	F D LONG C	Y		\$669,657.12	\$750,000.00		28	ERROR
85-E-0755	RAILROAD S	Y		\$1,055,105.74	\$750,000.00		41	ERROR
85-B-0755	SWANSON CO	Y		\$845,482.04	\$750,000.00		13	ERROR
85-B-1454	DUTRAY/BLAZ	Y		\$3,874,386.00		\$3,647,000.00	ERROR	6
85-B-1454	SPANDECK I	Y		\$3,647,000.00		\$3,647,000.00	ERROR	0
85-B-1454	WESTMONT I	Y		\$3,945,777.00		\$3,647,000.00	ERROR	8
85-B-1473	B L MONTA			\$15,200,000.00			ERROR	ERROR
85-B-1473	GENERAL CR			\$13,953,555.00			ERROR	ERROR
85-B-1473	INTERNATIO			\$20,693,301.00			ERROR	ERROR
85-B-1473	SPANDECK,	Y		\$10,457,808.00			ERROR	ERROR
85-B-1473	WESTMONT I	Y		\$12,860,000.00			ERROR	ERROR
85-E-3881	GALYON CCW	?		\$67,000.00	\$67,555.00	\$67,000.00	-1	0
85-E-3881	SEARLEE CO	?		\$112,500.00	\$67,555.00	\$67,000.00	65	65
85-B-4513	DE LORENCE	Y		\$1,179,660.50			ERROR	ERROR
85-B-4513	NU-WAY TRA	?		\$0.00			ERROR	ERROR
85-B-4513	TANTANGELD	Y		\$2,081,419.84			ERROR	ERROR
85-B-4513	ACME ELECT	Y		\$717,000.00	\$660,539.00	\$640,000.00	-17	12
85-B-4513	ALFRED J.	Y		\$640,000.00	\$660,539.00	\$640,000.00	-26	0
85-B-4513	BARNES ELE	Y		\$774,000.00	\$660,539.00	\$640,000.00	-10	21
85-B-4513	CARR & DUF	Y		\$807,787.00	\$660,539.00	\$640,000.00	-6	26
85-B-4513	HEARTH HTQ	Y		\$723,000.00	\$660,539.00	\$640,000.00	-16	13
85-B-4513	RANCO CONS	Y		\$261,000.00	\$660,539.00	\$640,000.00	-23	3
85-B-4513	RAY ANELI	Y		\$584,000.00	\$660,539.00	\$640,000.00	-21	7
85-B-4513	UNITED WIR	Y		\$787,000.00	\$660,539.00	\$640,000.00	-9	23
85-B-5523	ALEXANDER	Y		\$95,000.00	\$125,000.00	\$112,411.00	-22	-13
85-B-5523	FRANK BIAN	?		\$171,700.00	\$125,000.00	\$112,411.00	37	53
85-B-5523	HAMPTON EE	Y		\$187,400.00	\$125,000.00	\$112,411.00	50	67
85-B-5523	MAGNUM, IN	Y		\$199,565.00	\$125,000.00	\$112,411.00	28	42
85-B-5523	PIONEER CO	Y		\$192,000.00	\$125,000.00	\$112,411.00	54	71
85-B-5523	GAUNNT CON	Y		\$171,500.00	\$172,500.00	\$112,411.00	0	53
85-B-5523	DANLADI CO	Y	Y	\$132,400.00	\$125,000.00	\$112,411.00	6	18
85-B-5523	FRANK BIAN	?		\$171,700.00	\$125,000.00	\$112,411.00	37	53
85-B-5523	FARKS & EU	Y		\$112,411.00	\$125,000.00	\$112,411.00	-10	0
85-B-5739	DELL-PENN	Y		\$132,415.00	\$200,000.00	\$193,000.00	-34	-31
85-B-5739	MARTELL CO	Y		\$345,400.00	\$200,000.00	\$193,000.00	73	79
85-B-5739	DANLADI CO	Y	Y	\$234,000.00	\$200,000.00	\$193,000.00	17	21
85-B-5801	ANGELO'S C	Y		\$245,000.00	\$170,121.00		44	ERROR
85-B-5801	E.J. ELECT			\$109,000.00	\$170,121.00		-35	ERROR
85-B-5801	ELECTRICAL	Y		\$125,000.00	\$170,121.00		-27	ERROR
85-E-5801	ERCO INIFI	Y		\$61,500.00	\$170,121.00		-52	ERROR
85-B-5801	GUANNT CON	Y		\$147,700.00	\$170,121.00		-13	ERROR
85-B-5801	HAMPTON EE	Y		\$144,950.00	\$170,121.00		-15	ERROR
85-B-5801	JOHN F DO	Y		\$139,500.00	\$170,121.00		-18	ERROR
85-B-5801	PIONEER CO	Y		\$155,000.00	\$170,121.00		-9	ERROR
85-B-5801	RAY ANELI	Y		\$172,000.00	\$170,121.00		1	ERROR
85-B-5801	RAYMOND V	Y		\$120,000.00	\$170,121.00		-29	ERROR
85-B-6019	J. MCCORMI	Y		\$67,563.93	\$75,500.00	\$67,963.00	-10	0
85-B-6019	MAYER BROS	Y		\$84,500.00	\$75,500.00	\$67,963.00	12	24
85-B-6019	RUFETZ BRO	Y		\$73,900.00	\$75,500.00	\$67,963.00	-2	9
85-B-7075	CSR RAILRD	Y		\$2,184,891.00	\$1,750,722.00	\$1,716,000.00	24	25



CONTRACT#	OFFEROR	SB	S.D.B	BID	GOV'T EST	AWARD PRICE	% OF GOV'	% OF AWA
85-B-7075	CENTRAL EN	Y		\$2,186,142.00	\$1,750,722.00	\$1,716,000.00	25	27
85-B-7075	RAILROAD S	Y		\$1,839,950.00	\$1,750,722.00	\$1,716,000.00	5	7
85-B-7075	SWANSON CO	Y		\$1,716,000.00	\$1,750,722.00	\$1,716,000.00	-2	0
85-B-7097	STREICHER	Y		\$146,262.00	\$133,500.00		10	ERROR
85-B-7097	LITTLE CON	Y		\$208,000.00	\$133,500.00		56	ERROR
85-B-7097	GULF SOUTH	Y		\$213,658.00	\$133,500.00		60	ERROR
85-B-7097	BATT CONST	Y		\$168,879.00	\$133,500.00		27	ERROR
85-B-7097	SUPERIOR L	Y		\$149,600.00	\$133,500.00		12	ERROR
85-B-7097	LINSEY'S	Y		\$139,967.00	\$133,500.00		5	ERROR
85-B-7097	NEIDIGH CO	Y		\$121,731.00	\$133,500.00		-9	ERROR
85-B-7097	LUBURN CON	Y		\$248,700.00	\$133,500.00		86	ERROR
85-B-7097	T & G CONS	Y		\$120,989.00	\$133,500.00		-9	ERROR
85-B-7217	JUDD CONST	Y		\$395,157.00	\$290,303.00		36	ERROR
85-B-7217	SCOID CONS	Y		\$298,900.00	\$290,303.00		3	ERROR
85-B-7705	SUN OHIO C			\$73,216.00	\$82,600.00	\$58,100.00	-11	26
85-B-7706	ELECTRIC E			\$69,618.00	\$82,600.00	\$58,100.00	-16	20
85-B-7706	ac electri			\$98,700.00	\$82,600.00	\$58,100.00	19	70
85-B-7706	WESTINGHOU			\$58,100.00	\$82,600.00	\$58,100.00	-30	0
85-B-7706	ALD-CASS E			\$67,500.00	\$82,600.00	\$58,100.00	-18	15
85-B-7706	UTILITY DY			\$78,300.00	\$82,600.00	\$58,100.00	-5	35
85-B-7887	MEADER CON	Y		\$63,880.00	\$51,600.00		-88	ERROR
85-B-7887	JOHN DILKS	Y		\$48,264.48	\$51,600.00		-6	ERROR
85-B-7887	ALDRIDGE E	Y		\$39,300.00	\$51,600.00		-24	ERROR
85-B-7887	UTILITLY D	Y		\$38,000.00	\$51,600.00		-26	ERROR
85-B-7924	CONTECK AS	Y		\$16,210.00	\$10,370.00		56	ERROR
85-B-7924	JET STAR N	Y		\$20,000.00	\$10,370.00		93	ERROR
85-B-7924	LEO MONDAY	Y		\$5,000.00	\$10,370.00		-42	ERROR
85-B-7924	MERIDIAN C	Y		\$10,690.00	\$10,370.00		3	ERROR
85-B-7924	MIDWEST SE	?		\$9,000.00	\$10,370.00		-13	ERROR
85-B-7932	PAULSEN PA	Y		\$69,500.00	\$35,216.00	\$24,900.00	97	179
85-B-7932	TINY'S CON	Y		\$24,500.00	\$35,216.00	\$24,900.00	-29	0
85-B-7932	JACOB & SO	Y		\$32,493.00	\$35,216.00	\$24,900.00	-8	30
85-B-7932	GLAKES CON	Y		\$80,200.00	\$35,216.00	\$24,900.00	128	222
85-B-7932	R.A. PETER	Y		\$32,566.00	\$35,216.00	\$24,900.00	-8	31
85-B-7932	BARETTA C			\$35,000.00	\$35,216.00	\$24,900.00	-1	41
85-B-7932	MIDWEST SE			\$24,995.00	\$35,216.00	\$24,900.00	-29	0
85-B-7938	NORTH AMER	Y		\$242,000.00	\$153,841.00	\$178,654.00	57	35
85-B-7938	KOETZ BART	Y		\$282,000.00	\$153,841.00	\$178,654.00	83	58
85-B-7938	BERT C. YO	Y		\$178,654.00	\$153,841.00	\$178,654.00	'6	0
85-B-7938	DOUGLASS C	Y		\$198,000.00	\$153,841.00	\$178,654.00	29	11
85-B-7938	GEO W. KEN	Y		\$229,900.00	\$153,841.00	\$178,654.00	49	29
85-B-7945	H.V. ALLEN			\$152,400.00	\$143,341.00	\$112,600.00	6	35
85-B-7945	L. PUGH &			\$148,476.00	\$143,341.00	\$112,600.00	4	32
85-B-7945	CENTURY AU			\$112,600.00	\$143,341.00	\$112,600.00	-21	0
85-B-9031	GAUNTT CON	Y		\$148,500.00	\$179,995.00	\$127,190.00	-17	17
85-B-9031	JACK COHEN	Y		\$136,000.00	\$179,995.00	\$127,190.00	-24	1016
85-B-9031	JJ RINK BL	Y		\$140,000.00	\$179,995.00	\$127,190.00	-22	10
85-B-9031	JOHN P DON	Y		\$131,800.00	\$179,995.00	\$127,190.00	-27	4
85-B-9031	MAGNUM INC	Y		\$128,000.00	\$179,995.00	\$127,190.00	-29	1
85-B-9031	MARTELL CO	Y		\$143,500.00	\$179,995.00	\$127,190.00	-20	13
85-B-9031	PAN BUILDI	Y		\$535,000.00	\$179,995.00	\$127,190.00	231	369
85-B-9031	SCOBRETT C	Y		\$178,412.00	\$179,995.00	\$127,190.00	-1	40



CONTRACT#	OFFEROR	SB	S.D.	BID	GOV'T EST	AWARD PRICE	%GF	gov'	% OF AWA
85-B-9031	STAATS CON	Y		\$127,190.00	\$179,995.00	\$127,190.00	-29		0
85-B-9031	UNITED PAR	Y		\$0.00	\$179,995.00	\$127,190.00	-100		-100
85-B-9031	WILLIAM F	Y		\$158,596.00	\$179,935.00	\$127,190.00	-12		-25
85-B-9031	RIVERIA CO	?	Y	\$0.00	\$179,935.00	\$127,190.00	-100		-100
85-B-9245	JUD CONST	Y		\$49,433.00	\$31,100.00	\$49,433.00	59		0
85-C-0401	C & B CONS	?		\$118,998.00			ERROR	ERROR	
85-C-0401	HUGO KEY &	Y		\$167,647.00			ERROR	ERROR	
85-C-4778	ACME ELECT	Y		\$468,515.00	\$265,717.00		76	ERROR	
85-C-4778	H V. ALLEN	Y		\$464,000.00	\$265,717.00		75	ERROR	
85-C-4778	ALFRED J.	Y		\$389,400.00	\$265,717.00		47	ERROR	
85-C-4778	M & M ELEC	Y		\$266,768.00	\$265,717.00		46	ERROR	
85-C-4778	SO. CALIF	Y		\$391,000.00	\$265,717.00		47	ERROR	
85-C-4778	BUCK LINE	Y		\$524,000.00	\$265,717.00		135	ERROR	
85-C-4778	RAMES CONS	Y		\$421,600.00	\$265,717.00		59	ERROR	
85-C-4778	NUCERO ELE	Y		\$494,000.00	\$265,717.00		86	ERROR	
85-C-4778	THE LOTT G	Y		\$626,000.00	\$265,717.00		136	ERROR	
85-C-4778	CARR & STU	Y		\$565,875.00	\$265,717.00		120	ERROR	
86-B-0005	MARTELL CO	Y		\$239,700.00	\$79,650.00	\$0.00	201	ERROR	
86-B-0011	CARMONE CO	Y		\$495,427.00	\$320,000.00		55	ERROR	
86-B-0011	K. THOMFSD	Y		\$504,000.00	\$320,000.00		58	ERROR	
86-B-0021	A.J. MAGGI	Y		\$2,543,000.00	\$2,500,000.00	\$2,596,000.00	18	9	
86-B-0022	ELINGERMAN	Y		\$2,756,160.00	\$2,500,000.00	\$2,696,000.00	12	4	
86-B-0022	E. BLUIDZI	Y		\$2,695,000.00	\$2,500,000.00	\$2,696,000.00	8	0	
86-B-0022	KOVILIC CO	Y		\$2,555,552.00	\$2,500,000.00	\$2,696,000.00	18	10	
86-B-0025	MARTELL CO	Y		\$3,463,000.00	\$2,031,239.00	\$2,215,721.00	70	56	
86-E-0025	RIPPER INC	Y		\$2,215,721.00	\$2,031,239.00	\$2,215,721.00	9	0	
86-B-0026	BIANCHI TR	N		\$613,000.00	\$0.00	\$1,174,777.00	ERROR	-46	
86-B-0026	C.D.A.G IN	Y		\$1,077,000.00	\$0.00	\$1,174,777.00	ERROR	-6	
86-B-0026	INTERNT'L	Y		\$1,616,575.00	\$0.00	\$1,174,777.00	ERROR	36	
86-B-0026	J.F. SEGMA	Y		\$625,000.00	\$0.00	\$1,174,777.00	ERROR	-47	
86-B-0026	BBG TECHNI	N		\$1,460,000.00	\$0.00	\$1,174,777.00	ERROR	24	
86-B-0026	OCONCE CON	Y		\$1,233,276.00	\$0.00	\$1,174,777.00	ERROR	5	
86-B-0029	ABHE & BVD	Y		\$467,150.00	\$229,000.00	\$129,500.00	104	261	
86-B-0029	E W AUDIT	Y		\$389,785.00	\$229,000.00	\$129,500.00	57	178	
86-B-0029	ENERGY ECO	Y		\$149,863.00	\$229,000.00	\$129,500.00	-35	18	
86-B-0029	HARCO CORP	Y		\$364,500.00	\$229,000.00	\$129,500.00	59	182	
86-B-0029	JJ O'ROURD	Y		\$373,000.00	\$229,000.00	\$129,500.00	63	189	
86-B-0029	FCA ENG	Y		\$129,500.00	\$229,000.00	\$129,500.00	-43	0	
86-B-0029	PRAUGHT CO	Y		\$377,700.00	\$229,000.00	\$129,500.00	65	192	
86-E-0029	R R HENGLO	Y		\$228,529.00	\$229,000.00	\$129,500.00	-9	78	
86-B-0029	SINDETTON C	Y		\$217,202.00	\$229,000.00	\$129,500.00	-5	68	
86-B-0031	DRUM CONST	Y		\$18,913.76	\$25,000.00	\$58,608.00	-24	-69	
86-B-0031	JAMES J. A	Y		\$19,788.31	\$25,000.00	\$58,608.00	-21	-66	
86-B-0031	MILLER & S	Y		\$15,752.63	\$25,000.00	\$58,608.00	-37	-73	
86-B-0031	POLARIS CO	Y		\$18,060.86	\$25,000.00	\$58,608.00	-28	-69	
86-B-0031	TONY DEPAU	Y		\$21,104.80	\$25,000.00	\$58,608.00	-16	-64	
86-B-0039	R. P. SAWN	Y		\$693,038.00	\$665,000.00		4	ERROR	
86-B-0039	MARON CONS	Y		\$916,641.00	\$665,000.00		39	ERROR	
86-B-0042	BRIAN CONS	Y		\$122,000.00	\$172,800.00	\$198,500.00	28	12	
86-B-0042	CAT ASSEOC	Y		\$247,565.00	\$172,800.00	\$198,500.00	44	23	
86-B-0042	POLARIS CO	Y		\$166,500.00	\$172,800.00	\$198,500.00	15	0	
86-B-0042	RANCO CONS	Y		\$142,500.00	\$172,800.00	\$198,500.00	-17	-28	



CONTRACT#	OFFEROR	SE	S O B	EID	GOV'T EST	AWARD PRICE	% OF Gov't	% OF AWA	
86-B-0042	ROSE-ARAGO	Y	Y		\$369,666.00	\$172,600.00	\$198,500.00	114	86
86-B-0043	GARNET CON	Y			\$3,086,000.00	\$2,900,000.00	\$3,088,000.00	6	0
86-B-0043	BALADI CO	Y	Y		\$3,693,000.00	\$2,900,000.00	\$3,088,000.00	25	18
86-B-0060	E.S. McCARE	Y			\$470,000.00	\$235,000.00	\$470,000.00	100	0
86-B-0060	DAYSPRING	Y			\$634,510.00	\$235,000.00	\$470,000.00	127	14
86-B-0061	ANGELIA INF	Y			\$3,089,721.75	\$2,802,000.00	\$2,934,577.00	10	5
86-B-0061	ARTCO CONS	Y			\$2,934,577.00	\$2,802,000.00	\$2,934,577.00	5	0
86-B-0061	DEFENDABLE	Y			\$2,473,000.00	\$2,802,000.00	\$2,934,577.00	-12	-16
86-B-0061	DURABLE IN	Y			\$3,182,000.00	\$2,802,000.00	\$2,934,577.00	12	7
86-B-0061	SITE DEVEL	Y			\$2,952,000.00	\$2,802,000.00	\$2,934,577.00	5	1
86-B-0061	TONY ANGEL	Y			\$3,295,000.00	\$2,802,000.00	\$2,934,577.00	19	12
86-B-0063	CHASE LI	Y			\$492,000.00	\$317,614.00	\$354,037.00	55	33
86-B-0063	ALB ELEC L	Y			\$354,037.00	\$317,614.00	\$354,037.00	11	0
86-B-0063	MW GOLDEN	Y			\$481,977.00	\$317,614.00	\$354,037.00	36	22
86-B-0063	DIAMOND BA	Y			\$543,000.00	\$317,614.00	\$354,037.00	73	55
86-B-0063	E.L. MITCH	Y			\$469,700.00	\$317,614.00	\$354,037.00	48	32
86-B-0063	LASAU ELEC	Y			\$437,375.00	\$317,614.00	\$354,037.00	38	24
86-B-0063	INTERSTATE	Y			\$488,500.00	\$317,614.00	\$354,037.00	51	36
86-B-0068	STRUCTURAL	Y			\$843,543.00	\$1,104,970.00		-24	ERROR
86-B-0068	SANTA BLAC	Y			\$1,641,600.00	\$1,104,970.00		49	ERROR
86-B-0068	T.J. MADDIN	Y			\$715,000.00	\$1,104,970.00		-35	ERROR
86-B-0068	SANTAFD IN	Y			\$1,285,673.00	\$1,104,970.00		16	ERROR
86-B-0068	J. PATRICKO	?			\$1,350,000.00	\$1,104,970.00		26	ERROR
86-B-0068	B.S. McCOPP	Y			\$1,157,684.00	\$1,104,970.00		5	ERROR
86-B-0068	STRUCTURAL	Y			\$843,543.00	\$1,104,970.00		-24	ERROR
86-B-0068	DUCTO BLK	Y			\$1,641,600.00	\$1,104,970.00		49	ERROR
86-B-0068	T.J. MADDEEN	Y			\$715,000.00	\$1,104,970.00		-35	ERROR
86-B-0068	SANTARC IN	Y			\$1,285,673.00	\$1,104,970.00		16	ERROR
86-B-0068	J. TALARICO	?			\$1,350,000.00	\$1,104,970.00		26	ERROR
86-B-0068	B.S. McCARE	Y			\$1,157,684.00	\$1,104,970.00		5	ERROR
86-B-0066	DOMINIC P.	Y			\$221,775.00	\$217,330.00	\$221,779.00	2	0
86-B-0096	IVERSON CO	Y			\$258,584.00	\$217,330.00	\$221,779.00	19	17
86-B-0096	McLANE CON	Y			\$269,273.00	\$217,330.00	\$221,779.00	24	21
86-B-0097	A.F. LUSI	Y			\$9,344,000.00	\$7,400,000.00	\$8,100,660.00	26	15
86-B-0097	CATAMOUNT	N			\$8,800,000.00	\$7,400,000.00	\$8,100,660.00	19	9
86-B-0097	GILBANE BL	N			\$6,265,540.00	\$7,400,000.00	\$8,100,660.00	12	2
86-B-0097	TRATORAS	N			\$10,095,000.00	\$7,400,000.00	\$8,100,660.00	36	25
86-B-0107	INSTRUMENT	N			\$778,885.00	\$750,000.00	\$778,885.00	4	0
86-B-0107	MOORE PROD	N			\$781,661.00	\$750,000.00	\$778,885.00	-2	-6
86-B-0107	WEBCOTT E	Y			\$948,450.00	\$750,000.00	\$778,885.00	26	22
86-B-0131	BANCROFT C	Y			\$51,250.00	\$37,000.00		39	ERROR
86-B-0131	EDCHEN EXC	Y			\$73,000.00	\$37,000.00		97	ERROR
86-B-0131	GRAND BANK	Y			\$156,000.00	\$37,000.00		322	ERROR
86-B-0131	WYMAN & SI	Y			\$15,770.00	\$37,000.00		35	ERROR
86-B-0134	FIFING SYS	Y			\$115,318.00	\$144,966.00	\$115,318.00	-20	0
86-B-0134	D. DIXON D	Y			\$143,900.00	\$144,966.00	\$115,318.00	-1	28
86-B-0134	HART ENG C	Y			\$127,800.00	\$144,966.00	\$115,318.00	2	28
86-B-0134	SWEFCD COR	Y			\$175,594.00	\$144,966.00	\$115,318.00	22	53
86-B-0134	PROCESS EN	Y			\$178,774.00	\$144,966.00	\$115,318.00	23	55
86-B-0134	R.J. SANDE	Y			\$152,346.00	\$144,966.00	\$115,318.00	33	67
86-B-0134	PROJET MAR	Y			\$214,830.00	\$144,966.00	\$115,318.00	48	86
86-B-0132	RANCO CONS	Y			\$296,200.00	\$254,900.00		-7	ERROR



CONTRACT#	OFFEROR	SB	S.D.E	BID	GOV'T EST	AWARD PRICE	%OF GOV'	% OF AWA
86-B-0138	GROVE ROOF	Y		\$654,540.00	\$254,900.00		157	ERROR
86-B-0138	MECH FIPIN	Y		\$314,200.00	\$254,900.00		23	ERROR
86-B-0138	THOMAS P	Y		\$323,780.00	\$254,900.00		27	ERROR
86-B-0138	GIULANI CO	Y		\$227,779.00	\$254,900.00		-11	ERROR
86-B-0138	DANLAD CO	Y		\$373,000.00	\$254,900.00		45	ERROR
86-B-0138	PNM CONST	Y		\$266,600.00	\$254,900.00		-7	ERROR
86-B-0138	PARKS & EU	Y		\$204,211.00	\$254,900.00		-20	ERROR
86-B-0138	GIANNA GEP	Y		\$239,000.00	\$254,900.00		-6	ERROR
86-B-0138	SCARETT C	Y		\$218,025.00	\$254,900.00		-14	ERROR
86-B-0156	Pressure C	Y		\$4,082,271.00	\$2,167,633.00	\$2,582,345.00	87	57
86-B-0156	BIG HORN CO	Y		\$4,004,685.50	\$2,167,633.00	\$2,582,345.00	77	55
86-B-0200	ABINGTON C	Y		\$470,000.00	\$424,710.00	\$449,000.00	11	5
86-B-0200	DALVCO INC	?		\$165,000.00	\$424,710.00	\$449,000.00	9	4
86-B-0200	GAFFNY CORP	Y		\$499,000.00	\$424,710.00	\$449,000.00	17	11
86-B-0200	HOLDEN ROB	Y		\$449,000.00	\$424,710.00	\$449,000.00	6	0
86-B-0200	JANUS INC	Y		\$521,000.00	\$424,710.00	\$449,000.00	23	16
86-B-0200	FRAUGHT CO	Y		\$580,000.00	\$424,710.00	\$449,000.00	37	29
86-B-0206	PROCEES EN	Y		\$625,460.00	\$424,710.00	\$449,000.00	25	18
86-B-0207	KOD MAINE	Y		\$379,000.00	\$180,467.00	\$355,700.00	93	7
86-B-0207	WYMAN & SI	Y		\$385,700.00	\$180,467.00	\$355,700.00	67	0
86-B-0207	NO BIDS RE	-	-	\$0.00	\$0.00	\$0.00	0	0
86-B-0209	A F WHITAC	Y		\$314,200.00	\$182,000.00		73	ERROR
86-B-0209	D L FOULIN	Y		\$325,500.00	\$182,000.00		79	ERROR
86-B-0209	-----	Y	--	\$0.00	\$0.00	\$0.00	0	0
86-B-0210	CONSOLIDAT	?		\$625,263.00	\$515,595.00	\$565,089.00	21	11
86-B-0210	GRIFED INC	Y		\$618,369.50	\$515,595.00	\$565,089.00	20	9
86-B-0210	JCN CONST	Y		\$593,089.00	\$515,595.00	\$565,089.00	16	6
86-E-0214	MAREL CONS	Y		\$47,640.00	\$32,441.00	\$47,640.00	47	0
86-E-0214	A J ERUND	Y		\$64,015.00	\$32,441.00	\$47,640.00	93	35
86-B-0215	EAY WEST E	Y		\$185,000.00	\$156,355.00	\$157,850.00	18	17
86-B-0215	D E WILLIA	Y		\$166,000.00	\$156,355.00	\$157,850.00	21	20
86-B-0215	EMERTECH E	Y		\$246,091.00	\$156,355.00	\$157,850.00	57	55
86-B-0215	HARRINGTON	Y		\$158,922.00	\$156,355.00	\$157,850.00	2	1
86-B-0215	RESERVE EL	Y		\$157,850.00	\$156,355.00	\$157,850.00	1	0
86-B-0215	LANE CO	Y		\$1,627,000.00	\$1,077,000.00	\$577,505.00	51	182
86-B-0216	MELROSE WT	Y		\$1,216,085.00	\$1,077,000.00	\$577,505.00	13	111
86-B-0216	MONIARDS C	Y		\$1,606,175.00	\$1,077,000.00	\$577,505.00	68	213
86-B-0216	SHANER & I	Y		\$2,071,227.00	\$1,077,000.00	\$577,505.00	92	259
86-B-0216	THOMAS P C	Y		\$1,292,901.00	\$1,077,000.00	\$577,505.00	24	131
86-B-0216	DAMLADI CO	Y	Y	\$1,660,086.82	\$1,077,000.00	\$577,505.00	53	186
86-B-0402	A.F. WHITA	Y		\$246,677.00	\$180,000.00		31	ERROR
86-B-0402	CBLWELL CO	Y		\$242,664.00	\$180,000.00		28	ERROR
86-B-0402	CONSOLIDAT	Y		\$284,996.00	\$180,000.00		50	ERROR
86-B-0402	E.L. SHEA	Y		\$211,707.00	\$180,000.00		11	ERROR
86-E-0402	NORTHERN M	Y		\$228,903.00	\$180,000.00		20	ERROR
86-B-0402	OVELLET CO	Y		\$224,355.00	\$180,000.00		18	ERROR
86-B-0402	FENTA CORP	Y		\$239,120.00	\$180,000.00		52	ERROR
86-B-0402	-----	Y			\$0.00		ERROR	ERROR
86-E-0402	MARTELL CO	Y		\$89,300.00	\$98,114.00		-9	ERROR
86-B-0403	MONIARDS C	Y		\$71,200.00	\$98,114.00		-27	ERROR
86-B-0403	FANZITTA E	Y		\$69,000.00	\$98,114.00		-9	ERROR
86-B-0403	CARFOLL GL	Y		\$73,700.00	\$91,683.00	\$78,700.00	-4	0



CONTRACT#	OFFEROR	SB	S.G.B	\$10	GOV'T EST	AWARD PRICE	%OF \$DV'	% OF AWA
86-B-0409	DEWALT IN	Y		\$93,500.00	\$81,698.00	\$78,700.00	14	19
86-B-0409	LYBURN CON	Y		\$137,100.00	\$81,698.00	\$78,700.00	68	74
86-B-0409	METRO-WIND	Y		\$90,612.00	\$81,698.00	\$78,700.00	11	15
86-B-0414	ARTHUR SCD	--		\$151,300.00	\$155,300.00	\$115,730.00	-3	31
86-B-0414	CITY FENCE	Y		\$192,633.00	\$155,300.00	\$115,730.00	24	66
86-B-0414	EXPERT FEN	--		\$115,730.00	\$155,300.00	\$115,730.00	-25	0
86-B-0415	CIALDEA EL	Y		\$265,000.00	\$183,784.00	\$232,000.00	35	10
86-B-0415	FRIITZ CONC	Y		\$246,320.00	\$188,784.00	\$232,000.00	77	4
86-B-0415	HAMMITT CO	Y		\$232,000.00	\$188,784.00	\$232,000.00	23	0
86-B-0415	HARTFORD C	Y		\$247,747.00	\$188,784.00	\$232,000.00	31	7
86-B-0417	DESIGN ROD	Y		\$234,000.00	\$170,000.00	\$174,444.00	38	34
86-B-0417	DIRECCO CO	Y		\$174,444.00	\$170,000.00	\$174,444.00	3	0
86-B-0417	SHAH CONST	Y		\$196,500.00	\$170,000.00	\$174,444.00	16	13
86-B-0417	TITAN ROOF	Y		\$156,000.00	\$170,000.00	\$174,444.00	16	14
86-B-0417	-----	--	--	\$0.00	\$0.00	\$174,444.00	0	0
86-B-0418	GAFFNEY CO	Y		\$614,650.00	\$177,930.00	\$223,500.00	77	41
86-B-0418	HAMMITT CO	Y		\$626,500.00	\$177,930.00	\$223,500.00	26	0
86-B-0419	CARMONE CO	Y		\$97,639.00	\$100,432.00	\$97,639.00	-3	0
86-B-0419	DI ROCCA C	Y		\$119,500.00	\$100,432.00	\$97,639.00	19	22
86-B-0419	ROCKWELL I	Y		\$209,995.00	\$100,432.00	\$97,639.00	109	115
86-B-0421	Nairnsgate	Y	N	\$56,688.00	\$51,800.00	\$56,685.00	7	0
86-B-0422	BRITELITE	Y		\$110,700.00	\$154,496.00	\$57,700.00	-27	55
86-B-0422	BAL ELECTR	Y		\$124,000.00	\$154,496.00	\$57,700.00	-20	115
86-B-0422	J G SALAS	Y		\$57,700.00	\$154,496.00	\$57,700.00	-63	0
86-B-0422	LADUCA AES	Y		\$86,500.00	\$154,496.00	\$57,700.00	-44	51
86-B-0422	TFI INC	Y		\$100,085.00	\$154,496.00	\$57,700.00	-30	87
86-B-0424	CITY VENTU	Y		\$159,320.00	\$114,820.00		35	ERROR
86-B-0424	POLONIA CO	Y		\$108,298.00	\$114,820.00		12	ERROR
86-B-0425	EDWARD WIT			\$1,136,054.00	\$345,000.00		20	ERROR
86-B-0425	FONTAG CON			\$684,096.00	\$345,000.00		-30	ERROR
86-B-0425	PRESSURE C	Y		\$544,714.00	\$345,000.00		-0	ERROR
86-B-0430	ELCOR ELEC	Y		\$24,603.00	\$17,776.00		38	ERROR
86-B-0430	JACK COHEN	?		\$18,374.00	\$17,776.00		3	ERROR
86-B-0430	JDS OCTUMA	Y		\$22,350.00	\$17,776.00		26	ERROR
86-B-0430	FENW-LAROUS	Y		\$22,153.00	\$17,776.00		25	ERROR
86-B-0430	SAFFODR	Y		\$24,050.00	\$17,776.00		35	ERROR
86-B-0433	SEET-TEMP	Y		\$51,500.00	\$112,632.00	\$91,500.00	-19	0
86-B-0433	BRITE LITE	Y		\$30,700.00	\$112,632.00	\$91,500.00	-18	1
86-B-0433	GRANTOM ME	Y		\$96,350.00	\$112,632.00	\$91,500.00	-13	7
86-B-0433	NJP A/C &	Y		\$96,000.00	\$112,632.00	\$91,500.00	-13	7
86-B-0442	ABIELE CON	Y		\$2,112,770.00	\$1,409,169.00	\$1,764,000.00	50	20
86-B-0442	ELCOR CONT	Y		\$1,976,000.00	\$1,409,169.00	\$1,764,000.00	40	12
86-B-0442	EXPERT ELE	Y		\$1,629,363.00	\$1,409,169.00	\$1,764,000.00	20	-4
86-B-0442	G & R FLEC	Y		\$1,964,000.00	\$1,409,169.00	\$1,764,000.00	35	11
86-B-0442	J G SALAS	Y		\$1,977,700.00	\$1,409,169.00	\$1,764,000.00	40	12
86-B-0442	VALQUEST C	Y		\$1,772,000.00	\$1,409,169.00	\$1,764,000.00	25	0
86-B-0445	ACME FIRE	Y		\$23,680.00	\$52,443.00	\$23,680.00	-55	0
86-B-0447	AMERICAN P	--		\$54,055.00	\$56,880.00	\$54,055.00	-5	0
86-B-0447	PANZITTA E	--		\$72,000.00	\$56,880.00	\$54,055.00	23	35
86-B-0456	E.M. AUDET	Y		\$120,635.00	\$178,395.00	\$126,300.00	24	75
86-B-0456	E.M. AUDET	Y		\$120,635.00	\$178,395.00	\$126,300.00	24	75
86-B-0456	LYNNWELL A	Y		\$195,300.00	\$178,395.00	\$126,300.00	9	55



CONTRACT#	OFFEROR	SB	S.D.E	BID	GOVT EST	AWARD PRICE	% OF GOV'T	% OF AWR
86-B-0466	LYNNMILL A	Y		\$155,300.00	\$178,395.00	\$126,300.00	9	55
86-B-0466	MOKHAWK VAL	Y		\$126,300.00	\$178,395.00	\$126,300.00	-29	0
86-B-0466	THE RYAN C	Y		\$128,800.00	\$178,395.00	\$126,300.00	-22	10
86-B-0466	TRE RYAN C	Y		\$128,800.00	\$178,395.00	\$126,300.00	-22	10
86-B-0464	BGM EASTER	Y		\$126,650.00	\$146,000.00	\$126,650.00	-6	0
86-B-0464	GEO. MEHRE	Y		\$162,220.00	\$146,000.00	\$126,650.00	11	19
86-B-0464	MARAPAMIS	Y		\$126,500.00	\$145,000.00	\$126,650.00	5	16
86-B-0464	MCALLISTER	Y		\$168,000.00	\$145,000.00	\$126,650.00	15	23
86-B-0464	PIONEER CO	Y		\$142,000.00	\$146,000.00	\$126,650.00	-3	4
86-E-0466	COTTMAN ME	Y		\$128,100.00	\$120,086.00	\$128,100.00	7	0
86-B-0466	GAUDELLI E	Y		\$128,800.00	\$120,086.00	\$128,100.00	7	1
86-B-0466	KOHLER BRG	Y		\$127,000.00	\$120,086.00	\$128,100.00	14	7
86-B-0466	SHELLY'S D	Y		\$168,000.00	\$120,086.00	\$128,100.00	40	31
86-B-0467	EPIC CONTR	Y		\$368,100.00	\$192,216.00		92	ERROR
86-B-0467	EPIC CONTR	Y		\$368,100.00	\$192,216.00		92	ERROR
86-B-0471	R J DELMON	Y		\$295,805.00	\$185,145.00		114	ERROR
86-B-0471	ROBERT COD	Y		\$227,600.00	\$185,145.00		23	ERROR
86-B-0473	SPERRY CON	Y		\$50,400.00	\$84,500.00		-40	ERROR
86-B-0475	M E SEALC	Y		\$77,218.00	\$84,500.00		-9	ERROR
86-B-0478	LYDURATIONS	Y		\$129,000.00	\$80,000.00	\$103,408.00	60	24
86-B-0478	EMERALD CO	Y		\$118,800.00	\$80,000.00	\$103,408.00	49	15
86-B-0478	ROBINEON E	Y		\$131,530.00	\$80,000.00	\$103,408.00	65	27
86-B-0478	HAWMITT CO	Y		\$144,000.00	\$80,000.00	\$103,408.00	80	29
86-B-0478	MEBO CONST	Y		\$118,818.00	\$80,000.00	\$103,408.00	49	16
86-B-0478	FRITZ CONS	Y		\$102,408.00	\$80,000.00	\$103,408.00	29	0
86-B-0479	SPENNAW CO	Y		\$126,400.00	\$95,723.00		88	ERROR
86-B-0480	AMITY PAVI	Y		\$89,250.00	\$83,285.00	\$49,360.00	168	81
86-B-0480	CHATTERJEE	Y		\$58,000.00	\$83,285.00	\$49,360.00	74	18
86-B-0480	COPPOLA FA	Y		\$49,360.00	\$83,285.00	\$49,360.00	48	0
86-B-0480	METRO CONT	Y		\$76,188.00	\$83,285.00	\$49,360.00	128	54
86-B-0481	COTTMAN ME	Y		\$125,100.00	\$175,000.00	\$102,484.00	8	65
86-B-0481	DEL VAL ME	Y		\$175,823.00	\$175,000.00	\$102,484.00	3	76
86-B-0481	FARINELLI	Y		\$275,970.00	\$175,000.00	\$102,484.00	58	163
86-B-0481	NORTH AMER	Y		\$246,000.00	\$175,000.00	\$102,484.00	41	140
86-B-0481	SCHAEFFER	Y		\$102,484.00	\$175,000.00	\$102,484.00	-41	0
86-B-0484	M FRANK HI	Y		\$149,143.00	\$283,300.00		-47	ERROR
86-B-0484	US FLOORS	Y		\$214,414.00	\$283,300.00		-24	ERROR
86-B-0484	CONTRACT F	Y		\$232,344.45	\$283,300.00		-18	ERROR
86-B-0484	EASEMAN ER	Y		\$283,340.00	\$283,300.00		-18	ERROR
86-B-0484	HAYWOOD SE	Y		\$287,925.00	\$283,300.00		2	EFADR
86-B-0484	MARON CONS	Y		\$307,750.00	\$283,300.00		9	ERROR
86-B-0484	CRIS CONTR	Y		\$347,840.00	\$283,300.00		23	ERROR
86-B-0484	DORIC PLDG	Y		\$364,000.00	\$283,300.00		28	ERROR
86-B-0488	A P WHITAK	Y		\$350,000.00	\$181,052.00		93	EFADR
86-B-0488	OLD TOWN A	Y		\$274,975.00	\$181,052.00		52	ERROR
86-B-0489	MAGNUM INC	N		\$166,380.00	\$172,132.00	\$166,380.00	-3	0
86-B-0489	ROBERT RIP	Y		\$263,721.00	\$176,000.00	\$176,000.00	147	118
86-B-0490	R L MYLET	Y		\$163,000.00	\$176,000.00	\$176,000.00	21	7
86-B-0490	BOINET INC	Y		\$176,000.00	\$176,000.00	\$176,000.00	13	0
86-B-0490	PANDITTA E	Y		\$156,000.00	\$176,000.00	\$176,000.00	26	11
86-B-0490	ERDURIO EX	Y		\$248,800.00	\$176,000.00	\$176,000.00	57	39
86-B-0490	S G MAETRI	Y		\$210,800.00	\$176,000.00	\$176,000.00	39	20



CONTRACT#	OFFEROR	SS	S.D.B	BID	GOV'T EST	AWARD PRICE	% OF GOV'	% OF AVG
86-B-0495	MURK ELEVA	?		\$748,219.00	\$554,000.00	\$748,219.00	35	0
86-B-0496	ART TRAMCO	Y		\$35,435.00	\$51,149.00	\$35,435.00	-31	0
86-B-0496	CEASOR DEF	Y		\$24,500.00	\$51,149.00	\$35,435.00	-52	-31
86-B-0496	DAVID J FA	Y		\$61,321.00	\$51,149.00	\$35,435.00	28	24
86-B-0496	ENERGY ENG	?		\$0.00	\$51,149.00	\$35,435.00	-100	-100
86-B-0496	LVBURN CON	Y		\$88,000.00	\$51,149.00	\$35,435.00	72	148
86-B-0496	W R CASTIL	Y		\$40,800.00	\$51,149.00	\$35,435.00	-20	15
86-B-0500	BEV MEHRER	Y		\$76,757.00	\$82,000.00	\$66,450.00	-6	16
86-B-0500	GREAT AMEP	Y		\$125,711.00	\$82,000.00	\$66,450.00	66	104
86-B-0500	EDGIVE ROOF	Y		\$66,450.00	\$82,000.00	\$66,450.00	-19	0
86-B-0500	PENN FERRY	Y		\$74,222.00	\$82,000.00	\$66,450.00	-3	12
86-B-0500	PIONEER CO	?		\$81,000.00	\$82,000.00	\$66,450.00	-1	22
86-B-0509	BELL'S ROO	Y		\$206,245.00	\$249,815.00	\$206,245.00	-17	0
86-B-0509	D & S ROOF	Y		\$247,455.00	\$249,815.00	\$206,245.00	-1	20
86-B-0509	JESSIE CON	Y		\$141,875.00	\$249,815.00	\$206,245.00	-43	-31
86-B-0510	BELL'S ROO	Y		\$206,925.00	\$250,985.00	\$206,925.00	-18	0
86-B-0510	D & S ROOF	Y		\$240,825.00	\$250,985.00	\$206,925.00	-4	16
86-B-0510	ENDLESS GU	Y		\$277,000.00	\$250,985.00	\$206,925.00	10	34
86-B-0510	JESSIE CON	Y		\$141,875.00	\$250,985.00	\$206,925.00	-43	-31
86-B-0510	WEISMAN RD	Y		\$501,313.00	\$250,985.00	\$206,925.00	100	142
86-B-0511	BELL'S ROOF	Y		\$119,130.00	\$140,800.00	\$119,130.00	-15	0
86-B-0511	D & S ROOF	Y		\$147,591.00	\$140,800.00	\$119,130.00	5	24
86-B-0511	ENDLESS GU	Y		\$181,000.00	\$140,800.00	\$119,130.00	36	50
86-B-0511	JESSIE CON	Y		\$67,525.00	\$140,800.00	\$119,130.00	-38	-27
86-B-0512	BELL'S ROO	Y		\$118,370.00	\$140,800.00	\$118,370.00	-16	0
86-B-0512	D & S ROOF	Y		\$145,137.00	\$140,800.00	\$118,370.00	3	29
86-B-0512	JESSIE CON	Y		\$87,516.00	\$140,800.00	\$118,370.00	-38	-28
86-B-0513	D&S ROOFIN	Y		\$528,507.00	\$224,750.00	\$444,285.00	157	30
86-B-0513	M. WEISMAN	Y		\$144,285.00	\$224,750.00	\$444,285.00	98	0
86-B-0515	E STREMEER	Y		\$1,587,203.00	\$558,400.00	\$1,338,886.00	163	16
86-B-0515	DAYFIELD C	Y		\$1,368,886.00	\$558,400.00	\$1,338,886.00	143	0
86-B-0515	CERTIFIED	Y		\$1,373,000.00	\$558,400.00	\$1,338,886.00	248	40
86-B-0515	ILICE CONG	Y		\$1,814,560.00	\$558,400.00	\$1,338,886.00	297	36
86-B-0517	BERNARD K	Y		\$67,651.00	\$70,053.00		-3	ERROR
86-B-0517	ROBERT R.	Y		\$83,200.00	\$70,053.00		13	ERROR
86-B-0519	B STEENS C	Y		\$66,000.00	\$47,500.00	\$66,000.00	23	0
86-B-0519	DEL-VAL ME	Y		\$66,983.00	\$47,500.00	\$66,000.00	38	12
86-B-0519	MATHIS CON	Y		\$67,623.75	\$47,500.00	\$66,000.00	41	15
86-B-0519	THOMAS B.	Y		\$74,343.00	\$47,500.00	\$66,000.00	55	26
86-B-0519	H V ALLEN	Y		\$161,160.00	\$47,500.00	\$66,000.00	174	102
86-B-0533	SMITHTOWN	Y		\$110,168.00	\$110,632.00		-2	ERROR
86-B-0502	ESTAR MNT	Y		\$253,750.00			ERROR	ERROR
86-B-0502	ALBANY JAI	?		\$177,765.00			ERROR	ERROR
86-B-0502	CONTRACT I	Y		\$204,850.00			ERROR	ERROR
86-B-0502	STEEL CIRC	Y		\$175,850.00			ERROR	ERROR
86-B-0504	ECLES EEC	Y	Y	\$1,981,797.00	ERR25		ERROR	ERROR
86-B-0505	EWLD MAT	Y		\$46,161.00	\$26,301.00		75	ERROR
86-B-0505	SUNBELT TE	Y		\$49,400.00	\$26,301.00		98	ERROR
86-B-0507	MID MAINE	?		\$379,000.00	\$190,467.00		95	ERROR
86-B-0507	WYMAN & SI	?		\$355,700.00	\$190,467.00		87	ERROR
86-B-0515	A & C SLOG	Y		\$1,971,815.00			ERROR	ERROR
86-B-0515	ABLE ENTER	Y		\$3,063,514.00			ERROR	ERROR



CONTRACT#	OFFEROR	SE	S D B	BID	GOV'T EST	AWARD PRICE	% OF GOV'	% OF AWA
86-B-0815	ATLANTIC M	Y		\$2,062,562.00			ERROR	ERROR
86-B-0815	CASSIDY CL	Y		\$1,542,018.00			ERROR	ERROR
86-B-0815	CUSTODIAL	Y		\$2,129,280.00			ERROR	ERROR
86-B-0815	DTM INC	?		\$2,011,995.00			ERROR	ERROR
86-B-0815	EBON SERVI	Y		\$2,715,127.00			ERROR	ERROR
86-B-0815	GENERAL SE	Y		\$1,650,870.00			ERROR	ERROR
86-B-0815	GOVERNMENT	Y		\$1,644,042.00			ERROR	ERROR
86-B-0815	INDUSTRIAL	Y		\$2,199,086.00			ERROR	ERROR
86-B-0815	J & L JANI	Y		\$1,883,572.00			ERROR	ERROR
86-B-0815	J & W JANI	Y		\$1,087,190.00			ERROR	ERROR
86-B-0815	OPERATIONS	?		\$2,333,450.00			ERROR	ERROR
86-B-0815	SEE CLEAR	Y		\$1,982,009.00			ERROR	ERROR
86-B-0815	SPICK AND	Y		\$2,617,787.00			ERROR	ERROR
86-B-0815	SULLIVAN J	Y		\$2,508,475.00			ERROR	ERROR
86-B-0815	THE PROFES	Y		\$1,444,646.00			ERROR	ERROR
86-B-0815	A TO Z MAI	Y	Y	\$1,834,152.00			ERROR	ERROR
86-B-0815	ALPHA MAIN	Y	Y	\$1,705,650.00			ERROR	ERROR
86-B-0815	GM & M CLE	Y	Y	\$1,535,070.00			ERROR	ERROR
86-B-0815	J & H BLDG	Y	Y	\$1,379,724.00			ERROR	ERROR
86-B-0815	KOREAN MAI	Y	Y	\$1,958,947.00			ERROR	ERROR
86-B-0815	SUCRE INC	Y	Y	\$2,458,240.00			ERROR	ERROR
86-B-0815	SWALLEY CO	Y	Y	\$1,825,088.00			ERROR	ERROR
86-B-0815	UNION JANI	Y	Y	\$1,894,155.00			ERROR	ERROR
86-B-0818	IBI SECURI	Y		\$1,463,049.10	ERROR		ERROR	ERROR
86-B-0818	APEX INVES	Y	Y	\$1,618,044.51	ERROR		ERROR	ERROR
86-B-0818	VALLEY FOR	Y	Y	\$1,381,678.35	ERROR		ERROR	ERROR
86-B-0818	WILLIAM GU	Y	Y	\$1,248,224.60	ERROR		ERROR	ERROR
86-B-0819	ECCLES SEC	Y	Y	\$107,801.00	ERROR		ERROR	ERROR
86-B-0819	JFJ SECURI	Y	Y	\$104,800.00	ERROR		ERROR	ERROR
86-B-0836	ALPHA MNT	Y		\$886,424.53		\$669,749.00	ERROR	33
86-B-0836	BILL R HEA	?		\$697,577.11		\$669,749.00	ERROR	4
86-B-0836	CLEAR THRU	Y		\$713,481.23		\$669,749.00	ERROR	7
86-B-0836	HYLANE INC	Y		\$797,920.15		\$669,749.00	ERROR	19
86-B-0836	INDUSTRIAL	Y		\$1,027,567.82		\$669,749.00	ERROR	59
86-B-0836	JOHNSON &	?		\$1,062,174.18		\$669,749.00	ERROR	59
86-B-0836	L J MICHLA	Y		\$829,419.84		\$669,749.00	ERROR	24
86-B-0836	NORTHERN V	Y		\$917,652.19		\$669,749.00	ERROR	37
86-B-0836	OPERATIONS	Y		\$1,137,225.86		\$669,749.00	ERROR	70
86-B-0836	PARURKEE C	Y		\$1,221,986.68		\$669,749.00	ERROR	82
86-B-0836	R & D CUST	Y		\$722,843.66		\$669,749.00	ERROR	8
86-B-0836	SRC INC	Y		\$563,082.81		\$669,749.00	ERROR	-16
86-B-0836	MEDINA BRO	Y	Y	\$999,833.42		\$669,749.00	ERROR	34
86-B-0836	MR KLEAN J	Y	Y	\$907,676.48		\$669,749.00	ERROR	36
86-B-0836	SPICK & SP	Y	Y	\$1,227,728.87		\$669,749.00	ERROR	83
86-B-0836	TELLENY JA	?	Y	\$1,241,775.00		\$669,749.00	ERROR	85
86-B-0836	WINSTON JA	Y	Y	\$1,641,777.35		\$669,749.00	ERROR	145
86-B-0840	COMMAND SE	Y		\$1,435,729.00	\$0.00	\$0.00	0	ERROR
86-B-0840	E M S.I.	Y		\$1,494,988.32	\$0.00	\$0.00	0	ERROR
86-B-0840	GREAT FLAI	Y		\$1,123,257.32	\$0.00	\$0.00	0	ERROR
86-B-0840	ISI SEC. S	Y		\$1,257,529.60	\$0.00	\$0.00	0	ERROR
86-B-0840	FOCKPORT I	Y		\$1,441,116.10	\$0.00	\$0.00	0	ERROR
86-B-0840	UNITED INT	Y		\$1,194,057.60	\$0.00	\$0.00	0	ERROR



CONTRACT#	OFFEROR	SB	S.D.B	BID	GOV'T EST	AWARD PRICE	% OF gOV'	% OF AWA
86-B-0840	UNIVERSAL	Y		\$1,609,334.40	\$0.00	\$0.00	0	ERROR
86-B-0840	MASTER DET	Y		\$1,554,229.52	ERROR		ERROR	ERROR
86-B-0840	NSF SECURI	Y		\$1,534,245.60	ERROR		ERROR	ERROR
86-B-0840	Q.E. ENTER	Y		\$1,473,167.52	ERROR		ERROR	ERROR
86-B-0840	RI	Y		\$1,345,753.05	ERROR		ERROR	ERROR
86-B-0840	STOVALL'S	Y		\$1,560,116.00	ERROR		ERROR	ERROR
86-B-0840	THE SWANSD	Y		\$1,297,924.64	ERROR		ERROR	ERROR
86-B-0840	OLD DOMINI	Y	Y	\$1,472,129.76	\$0.00	\$0.00	0	ERROR
86-B-0844	J VINCHO &	Y		\$23,450.00		\$39,999.00	ERROR	-41
86-B-0844	LERTCH WRE	Y		\$39,999.00		\$39,999.00	ERROR	0
86-B-0844	MERCER WRE	Y		\$42,670.00		\$39,999.00	ERROR	7
86-B-1452	BOULIN ENG	Y		\$192,688.00		\$96,844.00	ERROR	93
86-B-1452	HATCO INTE	?		\$230,733.00		\$96,844.00	ERROR	138
86-B-1452	HECO-PACIF	Y		\$291,340.00		\$96,844.00	ERROR	201
86-B-1452	OHIO CRANE	Y		\$274,029.00		\$96,844.00	ERROR	183
86-B-1460	DUTRA CONS	Y		\$5,730,012.00			ERROR	ERROR
86-B-1460	SFANDECK I	Y		\$6,948,200.00			ERROR	ERROR
86-B-1460	WESTMENT I	Y		\$200,000.00			ERROR	ERROR
86-B-1469	HECO-PACIF	Y		\$322,225.00			ERROR	ERROR
86-B-1470	BAY AREA C	Y		\$132,873.00			ERROR	ERROR
86-B-1470	HECO-PACIF	Y		\$135,774.00			ERROR	ERROR
86-B-1470	FOTRATI-SU	Y		\$278,000.00			ERROR	ERROR
86-B-2120	JCN CONSTR	Y		\$3,319,000.00	\$2,362,553.00	\$2,697,000.00	40	23
86-B-2120	PRAUGHT CO	Y		\$3,350,000.00	\$2,362,553.00	\$2,697,000.00	42	24
86-B-2128	TLT CONST.	Y		\$2,697,000.00	\$2,362,553.00	\$2,697,000.00	14	0
86-B-3936	AMTRAC DF	Y		\$1,116,166.00	\$1,116,500.00		0	ERROR
86-B-3936	R.R CONST	Y		\$1,571,350.00	\$1,116,500.00		41	ERROR
86-B-3936	W.E. YODER	Y		\$1,060,645.00	\$1,116,500.00		-4	ERROR
86-B-4432	EARTH PROP	Y		\$1,605,329.00	\$0.00	\$451,586.00	ERROR	255
86-B-4432	PHILLIPS N	Y		\$852,360.00	\$0.00	\$451,586.00	ERROR	89
86-B-4894	TRI-STATE			\$406,000.00	\$157,032.00		159	ERROR
86-B-4894	HAMPTON BE	Y		\$344,200.00	\$157,032.00		119	ERROR
86-B-4894	FLETCHER-H			\$277,594.00	\$157,032.00		77	ERROR
86-B-4894	DANLADI CO	Y		\$350,300.00	\$157,032.00		120	ERROR
86-B-4894	STAR BRITE	Y		\$222,000.00	\$157,032.00		41	ERROR
86-B-6544	A.C. SULLI	Y		\$100,000.00	\$25,715.00		289	ERROR
86-B-6544	POWER PIFI	Y		\$24,990.00	\$25,715.00		-3	ERROR
86-B-6544	POWER PIFI	Y		\$24,990.00	\$25,715.00		-3	ERROR
86-B-6544	INDEPENDEN	Y		\$17,860.00	\$25,715.00		-30	ERROR
86-B-7031	HARRELL ME	Y		\$126,631.00	\$133,600.00		-5	ERROR
86-B-7031	SERGENT SY	Y		\$130,156.00	\$133,600.00		-3	ERROR
86-B-7031	MOORE HTG	Y		\$124,400.00	\$133,600.00		-7	ERROR
86-B-7031	ELLIS CORP	Y		\$135,115.00	\$133,600.00		1	ERROR
86-B-7031	GRANES ?	Y		\$124,124.00	\$133,600.00		-7	ERROR
86-B-7031	UNITED COM	Y		\$136,392.00	\$133,600.00		2	ERROR
86-B-7031	PEERLESS ?	Y		\$166,861.00	\$133,600.00		26	ERROR
86-B-7031	CALCULUS	Y		\$178,980.00	\$133,600.00		34	ERROR
86-B-7031	FEDERAL IM	Y		\$189,543.00	\$133,600.00		42	ERROR
86-B-7078	LINDSEYS L	Y		\$65,724.00	\$55,600.00		15	ERROR
86-B-7078	T & G CONS	Y		\$54,606.00	\$55,600.00		-2	ERROR
86-B-7092	STREIGER	Y		\$195,000.00	\$180,000.00		64	ERROR
86-B-7092	GRAVES FLS	Y		\$251,237.00	\$180,000.00		40	ERROR



CONTRACT#	OFFEROR	SB	S.O.B	BID	GOV'T EST	AWARD PRICE	% OF GOV'	% OF AWA
86-B-7092	NEIDIGH CO	Y		\$276,582.00	\$180,000.00		54	ERROR
86-B-7224	SEADUA & AS			\$182,222.00	\$142,255.00		28	ERROR
86-B-7224	JUD CONST			\$188,000.00	\$142,255.00		33	ERROR
86-B-7224	PACIFIC GE	Y		\$190,000.00	\$142,255.00		34	ERROR
86-B-7224	INDY CONST	Y	Y	\$175,000.00	\$142,255.00		26	ERROR
86-B-7225	JUD CONST	Y		\$271,815.00	\$164,489.00		65	ERROR
86-B-7225	LOUIS LIND	Y		\$260,209.00	\$164,489.00		56	ERROR
86-B-7225	PACIFIC GE	Y		\$293,900.00	\$164,489.00		42	ERROR
86-B-7237	CONST DYNA	?		\$170,457.00	\$185,000.00	\$159,000.00	-8	7
86-B-7237	JUD CONST	Y		\$202,969.00	\$185,000.00	\$159,000.00	10	28
86-B-7237	RIVER-COTT	Y	Y	\$159,000.00	\$185,000.00	\$159,000.00	-14	0
86-B-7347	PARIS CONT		Y	\$599,000.00	\$364,921.00		64	ERROR
86-B-7347	BAYFIELD C	Y		\$506,600.00	\$364,921.00		39	ERROR
86-B-7347	ILICE CONS	Y		\$495,383.00	\$364,921.00		36	ERROR
86-B-7347	HOWARD J.	Y		\$498,309.00	\$364,921.00		37	ERROR
86-B-7347	CITY VENTU	Y		\$458,750.00	\$364,921.00		26	ERROR
86-B-7347	NYDAN CONS	Y		\$397,813.00	\$364,921.00		9	ERROR
86-B-7347	THE SOMERS		Y	\$482,240.00	\$364,921.00		32	ERROR
86-B-7347	BLINDERMAN	Y		\$593,011.00	\$364,921.00		63	ERROR
86-B-7746	LYTURN CON			\$67,181.00	\$70,000.00		-4	ERROR
86-B-7746	BELL STRON			\$28,976.00	\$70,000.00		-44	ERROR
86-B-7746	NORTHWEST			\$24,394.00	\$70,000.00		-65	ERROR
86-B-7746	MILL VALLE			\$24,450.00	\$70,000.00		-65	ERROR
86-B-7746	DEV INC			\$26,720.00	\$70,000.00		-62	ERROR
86-B-7746	TAYLORS MOO			\$22,196.00	\$70,000.00		-68	ERROR
86-B-7746	NORAH & AS			\$79,595.00	\$70,000.00		14	ERROR
86-B-7746	AMERICAN C			\$24,144.00	\$70,000.00		-66	ERROR
86-B-7746	SEPTAR			\$16,174.00	\$70,000.00		-77	ERROR
86-B-7746	CENTRAL IL			\$60,125.00	\$70,000.00		-14	ERROR
86-B-7758	ROONEY K.	N		\$8,248.51			ERROR	ERROR
86-B-7758	MIGHTY TID	N		\$35,803.69			ERROR	ERROR
86-B-7761	BOSTON CLU			\$93,260.00	\$41,380.00	\$39,900.00	140	149
86-B-7761	HOFFMAN &			\$47,000.00	\$41,380.00	\$39,900.00	14	18
86-B-7761	AJS TUCKPD			\$39,900.00	\$41,380.00	\$39,900.00	-4	0
86-B-7783	GRIFFITH B	?		\$399,630.00	\$253,727.00		294	ERROR
86-B-7783	MOORE TROS	?		\$349,199.00	\$253,727.00		38	ERROR
86-B-7783	RAPID CONS	?		\$483,951.00	\$253,727.00		91	ERROR
86-B-7785	BWN CONTRA	Y		\$98,992.00	\$65,527.00		36	ERROR
86-B-7787	DALTON KIL	Y		\$300,000.00	\$298,736.00		0	ERROR
86-B-7787	SMITH CONS	Y		\$246,500.00	\$298,736.00		-17	ERROR
86-B-7809	AMERICAN C	Y		\$64,894.00	\$45,019.00		44	ERROR
86-B-7809	BMS INC.	Y		\$29,610.00	\$45,019.00		-48	ERROR
86-B-7809	ENERGY SAV	Y		\$24,997.00	\$45,019.00		-44	ERROR
86-B-7809	FORD FOVE	Y		\$53,760.00	\$45,019.00		19	ERROR
86-B-7809	HARMEN LAU	?		\$20,800.00	\$45,019.00		-54	ERROR
86-B-7809	HOFFMAN &	?		\$59,980.00	\$45,019.00		33	ERROR
86-B-7809	JO CO CONS	Y		\$79,950.00	\$45,019.00		78	ERROR
86-B-7809	PHILLIP NA	Y		\$45,500.00	\$45,019.00		1	ERROR
86-B-7809	SEPT	Y		\$24,227.58	\$45,019.00		-46	ERROR
86-B-7816	RITE WAY L	Y		\$398,623.76	\$199,000.00		100	ERROR
86-B-7816	PARRS CONT	Y		\$307,358.75	\$199,000.00		54	ERROR
86-B-7816	HOWARD J	Y		\$265,407.60	\$199,000.00		33	ERROR



CONTRACT#	OFFEROR	S2	S.D.B	BID	GOV'T EST	AWARD PRICE	%OF GOV'	% OF AWA
86-B-7822	STRUCTURAL			\$309,650.00	\$118,282.00	\$128,000.00	162	142
86-B-7822	PARIS CONST			\$128,000.00	\$118,282.00	\$128,000.00	8	0
86-B-7822	LAKES & RI			\$139,860.00	\$118,282.00	\$128,000.00	18	9
86-B-7822	SINGLETON			\$170,703.00	\$118,282.00	\$128,000.00	44	33
86-B-7822	GUARANTEED			\$179,465.00	\$118,282.00	\$128,000.00	52	40
86-B-7839	DJM CONTRA	Y		\$133,300.00	\$134,000.00		-1	ERROR
86-B-7839	H.V. ALLEN	Y		\$278,000.00	\$134,000.00		107	ERROR
86-B-7844	GROHNE CO	?		\$204,600.00	\$127,500.00		61	ERROR
86-B-7844	M & H CONST	?		\$180,629.00	\$127,500.00		42	ERROR
86-B-8284	JUD CONST	Y		\$369,491.00	\$379,227.00	\$369,491.00	-3	0
86-B-8303	STREICHER	Y		\$151,000.00	\$106,700.00		42	ERROR
86-B-8303	DAN TRAWIC	Y		\$234,889.00	\$106,700.00		120	ERROR
86-B-8303	BATTIS CONS	Y		\$256,135.00	\$106,700.00		140	ERROR
86-B-8303	NEIDEGH CO	Y		\$165,968.00	\$106,700.00		55	ERROR
86-B-8303	LINDSEY'S	Y		\$178,127.00	\$106,700.00		67	ERROR
86-B-8413	FOSTER-WHE	N		\$747,600.00	\$1,371,253.00	\$1,049,968.00	-45	-29
86-B-8413	FRANK LILL	Y		\$1,049,968.00	\$1,371,253.00	\$1,049,968.00	-23	0
86-B-8413	HAMON FOWE	Y		\$1,036,570.00	\$1,371,253.00	\$1,049,968.00	-20	4
86-B-8413	M.C.I. CON	N		\$9,431,503.00	\$1,371,253.00	\$1,049,968.00	150	227
86-B-8413	NDOTER COR	N		\$1,231,032.00	\$1,371,253.00	\$1,049,968.00	-10	17
86-B-8413	SCHNEIDER	Y		\$1,025,032.00	\$1,371,253.00	\$1,049,968.00	-25	-2
86-B-8531	NYDAN CONS	Y		\$67,176.00	\$109,000.00		-20	ERROR
86-B-8531	ELECTRIC E	Y		\$58,722.00	\$109,000.00		-46	ERROR
86-B-8531	UTILITY BY	Y		\$114,127.00	\$109,000.00		5	ERROR
86-B-8531	AIOGASS EL	Y		\$109,691.00	\$109,000.00		1	ERROR
86-B-8531	JEFFFEY T.	Y		\$41,000.00	\$109,000.00		-62	ERROR
86-B-8531	DANA ENVIR	Y		\$87,695.00	\$109,000.00		-20	ERROR
86-B-8531	HOLROYD CO	Y		\$87,579.00	\$109,000.00		-20	ERROR
86-B-8559	BAYFIELD C	Y		\$66,773.00	\$67,138.95		-1	ERROR
86-B-8559	CAM ELEC	Y		\$5,712.00	\$67,138.95		-91	ERROR
86-B-8559	EXCELLENT	Y		\$61,600.00	\$67,138.95		-8	ERROR
86-B-8559	HOPPHMAN &	Y		\$88,597.00	\$67,138.95		32	ERROR
86-B-8559	ILPCE CONS	Y		\$69,600.00	\$67,138.95		4	ERROR
86-B-8559	NYDAN CONS	Y		\$72,018.00	\$67,138.95		7	ERROR
86-B-8559	OSCAR J.EE	Y		\$68,600.00	\$67,138.95		1	ERROR
86-B-8559	PELOMPA CO	Y		\$78,445.00	\$67,138.95		17	ERROR
86-B-8559	RITE-WAY	Y		\$64,770.00	\$67,138.95		26	ERROR
86-B-8559	SOMERS CO	Y	Y	\$69,443.00	\$67,138.95		3	ERROR
86-C-4910	RIPPER INC	Y		\$287,721.00	\$115,188.00		106	ERROR
86-C-4910	POLARIS CO	Y		\$145,200.00	\$115,188.00		26	ERROR
86-C-4910	SAMFTON CO	Y		\$227,800.00	\$115,188.00		98	ERROR
86-C-6544	UNITED MEC	Y		\$14,890.00	\$25,715.00		-42	ERROR
86-C-7764	WM SCHAUS	?		\$31,571.00	\$48,508.00		-35	ERROR
87- -4646	JACK COHEN	Y		\$53,870.00	\$76,053.00		-29	ERROR
87-4705	WALTER STR	Y		\$369,276.00	\$320,000.00		15	ERROR
87-4705	MAGNUM INC	Y		\$387,000.00	\$320,000.00		21	ERROR
87-4705	RANCO CONS	Y		\$387,000.00	\$320,000.00		5	ERROR
87-4705	INTL CONST	Y		\$334,345.00	\$320,000.00		4	ERROR
87-4705	DANLADI CO	Y		\$383,000.00	\$320,000.00		20	ERROR
87-4705	FMM CONST	Y		\$286,500.00	\$320,000.00		-10	ERROR
87-4705	MILLER BRO	Y		\$291,090.00	\$320,000.00		-9	ERROR
87-4705	MIBO CONST	Y		\$297,345.20	\$320,000.00		-7	ERROR



CONTRACT#	OFFEROR	SB	S.D.B	BID	GOV'T EST	AWARD PRICE	%OF GOV'	% OF AWA
87-4795	FARINELLI	Y		\$88,693.75	\$24,179.78		267	ERROR
87-4795	PNM CONST	?		\$24,200.00	\$24,179.78		0	ERROR
87-4795	HAMPTON CO	Y		\$48,700.00	\$24,179.78		101	ERROR
87-4795	RANCO CONS	Y		\$32,530.00	\$24,179.78		35	ERROR
87-4795	INTL CONST	Y		\$17,500.00	\$24,179.78		-28	ERROR
87-B-0004	R-E CONSTR	Y		\$53,264.34	\$113,510.00		-53	ERROR
87-B-0004	R-C CONSTR	Y		\$53,264.34	\$113,510.00		-53	ERROR
87-B-0010	A F LUSI C	Y		\$2,044,714.00	\$1,094,000.00		87	ERROR
87-B-0010	BRAPHY & P	Y		\$2,698,813.00	\$1,094,000.00		146	ERROR
87-B-0010	MARON CONS	Y		\$1,743,209.00	\$1,094,000.00		59	ERROR
87-B-0012	B WRUMBER	N		\$10,067,255.00	\$9,100,000.00	\$9,579,425.00	11	5
87-B-0012	BLINDERMAN	N			\$9,579,425.00	\$9,100,000.00	5	0
87-B-0012	BLUIDIUS C	N		\$12,337,000.00	\$9,100,000.00	\$9,579,425.00	36	29
87-B-0012	DEXKING S	N		\$9,598,000.00	\$9,100,000.00	\$9,579,425.00	5	0
87-B-0012	POWERS S S	N	Y	\$10,222,000.00	\$9,100,000.00	\$9,579,425.00	12	7
87-B-0016	DONATO SPA	Y		\$423,490.00	\$227,000.00	\$264,648.00	87	60
87-B-0016	ERICD ROMA	Y		\$346,643.00	\$227,000.00	\$264,648.00	53	31
87-B-0016	HAMPTON EE	Y		\$362,000.00	\$227,000.00	\$264,648.00	59	37
87-B-0016	MAGNUM, IN	Y		\$392,735.00	\$227,000.00	\$264,648.00	73	48
87-B-0016	PNM CONSTR	Y		\$264,648.00	\$227,000.00	\$264,648.00	17	0
87-B-0016	RAY ANGELI	Y		\$308,000.00	\$227,000.00	\$264,648.00	36	16
87-B-0016	SAMBE CONS	Y		\$384,000.00	\$227,000.00	\$264,648.00	69	45
87-B-0016	ROSS-ARACO	Y	Y	\$516,670.00	\$227,000.00	\$264,648.00	128	95
87-B-0019	BERNIER CO	Y		\$1,057,267.00	\$931,000.00	\$889,216.00	14	13
87-B-0019	GAFFNEY CO	Y		\$1,089,000.00	\$931,000.00	\$889,216.00	17	22
87-B-0019	GAFFNEY CO	Y		\$1,089,000.00	\$931,000.00	\$889,216.00	17	22
87-B-0019	GRENIER CO	Y		\$1,057,267.00	\$931,000.00	\$889,216.00	14	19
87-B-0019	H V ALLAN	Y		\$1,089,000.00	\$931,000.00	\$889,216.00	17	22
87-B-0019	H V ALLAN	Y		\$1,089,000.00	\$931,000.00	\$889,216.00	17	22
87-B-0019	JCN CONST	Y		\$1,365,000.00	\$931,000.00	\$889,216.00	47	54
87-B-0019	JCN CONSTR	Y		\$1,365,000.00	\$931,000.00	\$889,216.00	47	54
87-B-0019	MERRIMOCK	Y		\$892,500.00	\$931,000.00	\$889,216.00	-4	0
87-B-0019	MERRIMOCK	Y		\$892,500.00	\$931,000.00	\$889,216.00	-4	0
87-B-0019	MIDDLESEX	Y		\$564,000.00	\$931,000.00	\$889,216.00	4	8
87-B-0019	MIDDLESEX	Y		\$564,000.00	\$931,000.00	\$889,216.00	4	8
87-B-0019	MIDDLESEX			\$564,000.00	\$931,000.00	\$889,216.00	4	8
87-B-0019	OVER L UND	Y		\$889,216.00	\$931,000.00	\$889,216.00	-4	0
87-B-0019	SWEPCO COR	Y		\$1,211,000.00	\$931,000.00	\$889,216.00	30	36
87-B-0019	SWEPCO COR	Y		\$1,211,000.00	\$931,000.00	\$889,216.00	30	36
87-B-0023	CANASTOTA	Y		\$250,800.00	\$269,548.00	\$247,200.00	8	18
87-B-0023	D H SMITH	Y		\$351,991.87	\$269,548.00	\$247,200.00	31	42
87-B-0023	HANNA CONS	Y		\$368,000.00	\$269,548.00	\$247,200.00	37	49
87-B-0023	HANNA CONS	Y		\$368,000.00	\$269,548.00	\$247,200.00	37	49
87-B-0023	J & J KING	Y		\$247,200.00	\$269,548.00	\$247,200.00	-8	0
87-B-0023	JOHN FURA	Y		\$268,990.00	\$269,548.00	\$247,200.00	-8	9
87-B-0023	LANE CONST	Y		\$368,000.00	\$269,548.00	\$247,200.00	37	49
87-B-0023	LANE CONST	Y		\$368,000.00	\$269,548.00	\$247,200.00	37	49
87-B-0023	SCUTO BLAC	Y		\$397,652.00	\$269,548.00	\$247,200.00	48	61
87-B-0023	SCUTO BLAC	Y		\$397,662.00	\$269,548.00	\$247,200.00	48	61
87-B-0023	RICHARD LY	Y		\$366,000.00	\$269,548.00	\$247,200.00	24	35
87-B-0023	CANASTOTA	Y	?	\$250,800.00	\$269,548.00	\$247,200.00	8	18
87-B-0023	D,H SMITH	Y	?	\$351,991.87	\$269,548.00	\$247,200.00	31	42



CONTRACT#	OFFEROR	SE	S.D.B	BID	GOV'T EST	AWARD PRICE	% DIF gOV'	% OF AWA
87-B-0023	J&J KING D	Y	?	\$247,200.00	\$269,548.00	\$247,200.00	-8	0
87-B-0023	JOHN FURA	Y	?	\$268,950.00	\$269,548.00	\$247,200.00	-0	9
87-B-0023	RICHARD LY	Y	?	\$330,000.00	\$269,548.00	\$247,200.00	22	33
87-B-0026	KIRK ERDS	Y		\$1,443,500.00	\$1,042,000.00	\$1,094,000.00	39	32
87-B-0026	MAGNUM INC	Y		\$1,227,770.00	\$1,042,000.00	\$1,094,000.00	18	12
87-B-0026	SAMEE CONS	Y		\$1,094,000.00	\$1,042,000.00	\$1,094,000.00	5	0
87-B-0036	BALCAR CON	Y		\$477,600.00	\$180,546.00	\$180,000.00	165	165
87-B-0036	BERNMIL CO	Y		\$279,000.00	\$180,546.00	\$180,000.00	55	55
87-B-0036	CHATTERJEE	Y		\$225,000.00	\$180,546.00	\$180,000.00	25	25
87-B-0036	KORNAS CON	Y		\$192,710.00	\$180,546.00	\$180,000.00	7	7
87-B-0036	MANSHUL CO	Y		\$590,000.00	\$180,546.00	\$180,000.00	227	228
87-B-0036	P F LOMMA	Y		\$1,252,500.00	\$180,546.00	\$180,000.00	594	595
87-B-0036	ROME GENER	Y		\$225,000.00	\$180,546.00	\$180,000.00	25	25
87-B-0043	CACTMAN ME	Y		\$370,200.00	\$198,241.00	\$207,797.00	87	78
87-B-0043	WEBSCOTT EL	Y		\$894,499.00	\$198,241.00	\$207,797.00	351	330
87-B-0043	ALFRED J.	Y		\$207,797.00	\$198,241.00	\$207,797.00	5	0
87-B-0043	BORD DEVEL	Y		\$369,950.00	\$198,241.00	\$207,797.00	87	78
87-B-0043	H & M ELEC	Y		\$497,136.00	\$198,241.00	\$207,797.00	151	139
87-B-0043	DEL VAL ME	Y		\$798,868.00	\$198,241.00	\$207,797.00	303	284
87-B-0043	SAGE COM I	Y		\$408,203.00	\$198,241.00	\$207,797.00	106	96
87-B-0043	TEABOARD E	Y		\$606,342.00	\$198,241.00	\$207,797.00	206	192
87-B-0043	MUCERO ELE	Y		\$345,000.00	\$198,241.00	\$207,797.00	74	66
87-B-0043	SHELBY'S O	Y		\$500,000.00	\$198,241.00	\$207,797.00	152	141
87-B-0043	DELTA LINE	Y		\$625,000.00	\$198,241.00	\$207,797.00	215	201
87-B-0043	CARR & DUF	Y		\$421,955.00	\$198,241.00	\$207,797.00	113	103
87-B-0043	ONSHORE CO	Y		\$473,500.00	\$198,241.00	\$207,797.00	139	128
87-B-0043	THE LACK G	Y		\$414,000.00	\$198,241.00	\$207,797.00	109	99
87-B-0103	CRIS CONTR	Y		\$355,000.00	\$399,666.00		-11	ERROR
87-B-0111	M.V. WOODS	Y		\$59,938.00	\$34,661.00		73	ERROR
87-B-0111	J B. STAUF	Y		\$34,330.00	\$34,661.00		-1	ERROR
87-B-0111	ARCHER JDN	Y		\$24,535.00	\$34,661.00		-29	ERROR
87-B-0111	LAW BROS C	Y		\$65,454.00	\$34,661.00		89	ERROR
87-B-0111	R.J. ORTLI	Y		\$52,500.00	\$34,661.00		167	ERROR
87-B-0111	A.R. MACK	Y		\$54,600.00	\$34,661.00		58	ERROR
87-B-0308	BEIDLER TA	Y		\$247,247.00	\$230,000.00	\$247,247.00	7	0
87-B-0308	WEATHER MA	Y		\$245,200.00	\$230,000.00	\$247,247.00	7	-1
87-B-0401	JOHN MALLO	Y		\$69,000.00	\$70,000.00		-3	ERROR
87-B-0401	R.J. DELMO	Y		\$74,415.00	\$70,000.00		6	ERROR
87-B-0401	PAUL J. RO	Y		\$69,411.00	\$70,000.00		-1	ERROR
87-B-0401	EUGENE RIC	?		\$94,490.00	\$70,000.00		35	ERROR
87-B-0404	MAGNUM INC	Y		\$877,643.00	\$476,036.00	\$877,643.00	84	0
87-B-0404	DANLADI CO	Y	Y	\$864,000.00	\$476,036.00	\$877,643.00	81	-2
87-B-0408	A & M CONS	Y		\$87,900.00	\$87,900.00	\$87,900.00	0	0
87-B-0408	A.P. ELET	Y		\$126,059.00	\$87,900.00	\$87,900.00	43	43
87-B-0408	GUADELLI B	Y		\$121,000.00	\$87,900.00	\$87,900.00	38	38
87-B-0408	HAMPTON BE	Y		\$145,500.00	\$87,900.00	\$87,900.00	66	66
87-B-0408	PIONEER CO	Y		\$94,000.00	\$87,900.00	\$87,900.00	7	7
87-B-0408	UNITED CON	Y		\$118,000.00	\$87,900.00	\$87,900.00	34	34
87-B-0408	MAGNUM INC	Y		\$174,000.00	\$220,000.00	\$87,900.00	-21	39
87-B-0409	GAFFNY COR	Y		\$494,200.00	\$288,384.00		71	ERROR
87-B-0409	HESCO- ENV	?		\$797,000.00	\$288,384.00		176	ERROR
87-B-0409	LOCKWELL I	Y		\$450,000.00	\$288,384.00		56	ERROR



CONTRACT#	OFFEROR	SB	S.D.B	BID	GOV'T EST	AWARD PRICE	% OF gOV'	% OF AWA
87-B-0409	LYBURN CON	Y		\$393,800.00	\$268,384.00		37	ERROR
87-B-0409	WM BIRCH C	Y		\$345,598.00	\$268,384.00		21	ERROR
87-B-0411	A P WHITAK	Y		\$194,000.00	\$166,957.00	\$166,957.00	4	4
87-B-0411	BRADSTREET	Y		\$298,000.00	\$166,957.00	\$166,957.00	59	59
87-B-0411	CONSOLIDAT	Y		\$207,999.00	\$166,957.00	\$166,957.00	11	11
87-B-0411	E L SHEA I	Y		\$186,957.00	\$186,957.00	\$186,957.00	0	0
87-B-0411	MID MAINE	Y		\$228,600.00	\$186,957.00	\$186,957.00	22	22
87-B-0431	ROCKWELL I	Y		\$379,000.00	\$244,331.00	\$379,000.00	55	0
87-B-0432	BARBATO CO	Y		\$138,437.00	\$101,580.00	\$132,700.00	36	4
87-B-0432	KELCO BLDG	Y		\$132,700.00	\$101,580.00	\$132,700.00	31	0
87-B-0441	HUTCHINSON	Y		\$948,989.00	\$2,304,445.00	\$948,989.00	-59	0
87-B-0441	NORTH AMER	Y		\$1,279,000.00	\$2,304,445.00	\$948,989.00	-44	35
87-B-0441	UNITED CRE	Y		\$1,258,250.00	\$2,304,445.00	\$948,989.00	-45	33
87-B-0442	C. PYRAMID	Y		\$1,150,000.00	\$795,749.00		45	ERROR
87-B-0442	G.P. PALAM	Y		\$1,129,289.00	\$795,749.00		42	ERROR
87-B-0442	GAUDELLI B	Y		\$858,000.00	\$795,749.00		8	ERROR
87-B-0442	QUINTA CON	Y		\$955,000.00	\$795,749.00		20	ERROR
87-B-0442	LOTT GROUP	Y		\$1,111,000.00	\$795,749.00		40	ERROR
87-B-0442	MAGNUM INC	Y		\$1,093,799.00	\$795,749.00		37	ERROR
87-B-0442	DANLADI CO	Y	Y	\$1,230,000.00	\$795,749.00		55	ERROR
87-B-0458	MCSO CONST	Y		\$1,815,776.00	\$1,151,000.00		58	ERROR
87-B-0458	CIRCLE-A C	Y		\$1,668,411.95	\$1,151,000.00		45	ERROR
87-B-0458	D.S. CONTR	Y		\$971,611.94	\$1,151,000.00		-24	ERROR
87-B-0458	CENTRAL AT	Y		\$759,937.49	\$1,151,000.00		-34	ERROR
87-B-0458	TOWASCO CO	Y		\$673,763.00	\$1,151,000.00		-41	ERROR
87-B-0458	COSTELLO I	Y		\$633,274.38	\$1,151,000.00		-45	ERROR
87-B-0458	FRASSETTO	Y		\$995,553.98	\$1,151,000.00		-14	ERROR
87-B-0458	J.H. REID	Y		\$1,858,182.00	\$1,151,000.00		.61	ERROR
87-B-0468	MCS TO CON	Y		\$566,673.10	\$1,151,000.00		-16	ERROR
87-B-0468	CIRCLE A C	Y		\$1,815,776.00	\$1,151,000.00		58	ERROR
87-B-0468	J.H. REID	Y		\$1,858,182.00	\$1,151,000.00		61	ERROR
87-B-0468	A.H.2 CONT	Y		\$871,611.94	\$1,151,000.00		-24	ERROR
87-B-0468	CENTRAL AT	Y		\$759,937.49	\$1,151,000.00		-34	ERROR
87-B-0468	TOWASCO	Y		\$673,763.00	\$1,151,000.00		-41	ERROR
87-B-0468	COSTELLO I	Y		\$633,274.38	\$1,151,000.00		-45	ERROR
87-B-0468	FRASSETTO	Y		\$995,553.98	\$1,151,000.00		-14	ERROR
87-B-0472	GEM BUILDE	Y		\$91,640.00	\$91,400.00	\$66,850.00	-11	22
87-B-0472	MARON CONS	Y		\$65,550.00	\$91,400.00	\$66,850.00	-27	0
87-B-0472	Q R KURBIC	Y		\$101,680.00	\$91,400.00	\$66,850.00	11	52
87-B-0472	R P IANNUC	Y		\$97,000.00	\$91,400.00	\$66,850.00	7	46
87-B-0475	GAFFNEY CO	Y		\$519,000.00	\$288,384.00	\$383,500.00	80	35
87-B-0475	P & D CONT	Y		\$383,500.00	\$288,384.00	\$383,500.00	33	0
87-B-0475	ROCKWELL I	Y		\$458,000.00	\$288,384.00	\$383,500.00	59	19
87-B-0475	WILLIAM BI	Y		\$389,547.00	\$288,384.00	\$383,500.00	35	2
87-B-0800	-NCO CONST	Y		\$427,000.00		\$477,000.00	ERROR	-10
87-B-0800	J.R. SEAMA	Y		\$279,000.00		\$477,000.00	ERROR	-42
87-B-0800	RCI CONTRA	Y		\$477,000.00		\$477,000.00	ERROR	0
87-B-0810	OCONOC CON	Y		\$493,759.00	\$0.00		0	ERROR
87-B-0810	PRAUGHT CO	Y		\$530,000.00	\$0.00		ERROR	ERROR
87-B-0810	REAGAN CON	Y		\$247,000.00	\$0.00		ERROR	ERROR
87-B-0810	Oconoc Con	Y		\$498,789.00	\$269,548.00		85	ERROR
87-B-0810	Reagan Con	Y		\$247,000.00	\$269,548.00		-8	ERROR



CONTRACT#	OFFEROR	SB	S.O.B	BID	GOV'T EST	AWARD PRICE	%OF GOV'	% OF AWA
87-B-0810	PRAUGHT CO	Y		\$530,000.00	ERROR	ERROR	ERROR	ERROR
87-B-0810	AETNA BRID	Y	Y	\$941,350.00	\$0.00		ERROR	ERROR
87-B-0810	NEW ENGLAN	Y	Y	\$632,009.00	\$0.00		ERROR	ERROR
87-B-0810	Aetna Brid	Y	Y	\$941,350.00	ERROR	ERROR	ERROR	ERROR
87-B-0810	New Englan	Y	Y	\$632,009.00	ERROR	ERROR	ERROR	ERROR
87-B-0900	PRAUGHT CO	Y		\$480,000.00			ERROR	ERROR
87-B-1454	DEVAVULT SE	Y		\$91,882.00			ERROR	ERROR
87-B-1454	PARK WELDI	Y		\$26,741.00			ERROR	ERROR
87-B-2513	PC & J CON	Y		\$1,237,070.00	\$906,000.00	\$921,843.00	37	34
87-B-2513	R J SANDER	Y		\$921,843.00	\$906,000.00	\$921,843.00	2	0
87-B-2513	SULLIVAN M	Y		\$1,107,168.00	\$906,000.00	\$921,843.00	22	20
87-B-2513	SWERCO COR	Y		\$1,127,000.00	\$906,000.00	\$921,843.00	24	22
87-B-2513	THE GIBSON	Y		\$1,165,000.00	\$906,000.00	\$921,843.00	29	26
87-B-2501	O	0		\$0.00	\$0.00		ERROR	ERROR
87-B-2589	CENTRAL AT	Y		\$854,850.00	\$1,009,690.00	\$753,422.00	-15	13
87-B-2589	COSTELLA I	Y		\$759,525.00	\$1,009,690.00	\$753,422.00	-25	1
87-B-2589	DAVIS & HA	Y		\$1,067,786.00	\$1,009,690.00	\$753,422.00	6	42
87-B-2589	FINE CONTR	Y		\$753,422.00	\$1,009,690.00	\$753,422.00	-25	0
87-B-2589	THE BRIDGE	Y		\$1,395,140.00	\$1,009,690.00	\$753,422.00	38	85
87-B-2589	TOVASCA CO	Y		\$1,162,420.00	\$1,009,690.00	\$753,422.00	15	54
87-B-2606	REED & REE	Y		\$4,041,000.00	\$3,194,570.00	\$4,041,000.00	26	0
87-B-4706	DEL VAL ME	Y		\$105,908.00	\$93,961.00		13	ERROR
87-B-4706	F M NORTH	Y		\$60,505.00	\$93,961.00		-14	ERROR
87-B-4706	FRITURA IN	Y		\$95,720.00	\$93,961.00		2	ERROR
87-B-4706	JACK GILL	Y		\$106,210.00	\$93,961.00		13	ERROR
87-B-4706	JAMES J GA	?		\$73,490.00	\$93,961.00		-22	ERROR
87-B-4706	LANE & CLA	Y		\$79,597.00	\$93,961.00		-15	ERROR
87-B-4706	MECHANICAL	Y		\$80,700.00	\$93,961.00		-14	ERROR
87-B-4706	POWERHOUSE	Y		\$76,455.00	\$93,961.00		-19	ERROR
87-B-4706	SOCHAN MECH	Y		\$84,625.00	\$93,961.00		-10	ERROR
87-B-4706	SYNDER CO	Y		\$94,050.00	\$93,961.00		0	ERROR
87-B-4712	JACK COHEN	Y		\$39,250.00	\$23,290.00		43	ERROR
87-B-4712	M C SEAN E	Y		\$57,000.00	\$23,290.00		145	ERROR
87-B-4712	HAMPTON BE	Y		\$77,700.00	\$75,900.00		2	ERROR
87-E-4712	KIRK BROTH	Y		\$60,200.00	\$75,900.00		-10	ERROR
87-B-4724	NOVAK & AS	?		\$24,826.00	\$23,250.00		7	ERROR
87-B-4724	SPECTRUM C	Y		\$24,224.00	\$23,290.00		4	ERROR
87-B-4728	????????? A	?		\$59,885.00	\$50,020.00		20	ERROR
87-B-4728	DAVID R EL	Y		\$46,458.00	\$50,020.00		-7	ERROR
87-B-4728	JAMES J GA	Y		\$27,485.00	\$50,020.00		-45	ERROR
87-B-4728	JOHN J BEE	Y		\$39,492.00	\$50,020.00		-21	ERROR
87-B-4728	MECHANICAL	Y		\$42,350.00	\$50,020.00		-15	ERROR
87-B-4728	PETERSON S	Y		\$46,300.00	\$50,020.00		-7	ERROR
87-B-4728	DEL VAL ME	Y		\$244,986.00	\$166,100.00		47	ERROR
87-B-4743	COLLINSON	Y		\$197,471.00	\$150,300.00		31	ERROR
87-B-4743	HAMPTON CO	Y		\$242,000.00	\$150,300.00		61	ERROR
87-B-4743	RANCO CO	Y		\$225,440.00	\$150,300.00		50	ERROR
87-B-4743	RICHARD PU	Y		\$144,520.00	\$150,300.00		-4	ERROR
87-B-4764	DPC GENERA	Y		\$79,900.00	\$61,300.00		30	ERROR
87-B-4764	DUALL MAIN	Y		\$79,754.00	\$61,300.00		30	ERROR
87-B-4764	FALCON ASS	Y		\$52,000.00	\$61,300.00		-15	ERROR
87-B-4764	FORD GENER	Y		\$24,332.00	\$61,300.00		-60	ERROR



CONTRACT#	OFFEROR	SB	S.D.B	BID	GOV'T EST	AWARD PRICE	% OF gOV'	% OF AWA
87-B-4764	GOC & ASSO	Y		\$21,345.00	\$61,300.00		-65	ERROR
87-B-4764	HAZARDOUS	Y		\$60,000.00	\$61,300.00		-2	ERROR
87-B-4764	NAACO	Y		\$79,000.00	\$61,300.00		29	ERROR
87-B-4764	PROJECT DE	Y		\$46,300.00	\$61,300.00		-24	ERROR
87-B-4764	SEAGULL EN	Y		\$56,475.00	\$61,300.00		57	ERROR
87-B-4764	WILLIAM C.	?		\$51,400.00	\$61,300.00		-16	ERROR
87-B-4788	BAY WELDIN	Y		\$340,000.00	\$166,100.00		105	ERROR
87-B-4788	COTTMAN ME	Y		\$249,100.00	\$166,100.00		50	ERROR
87-B-4788	MAGNUM INC	Y		\$387,975.00	\$166,100.00		134	ERROR
87-B-4788	WILKO CORP	Y		\$500,000.00	\$166,100.00		201	ERROR
87-B-4796	ASBESTOS R	?		\$95,141.95	\$81,000.00		17	ERROR
87-B-4796	ASBESTOS R	Y		\$69,545.00	\$118,700.00		-41	ERROR
87-B-4796	CONSTRUCTI	?		\$78,250.00	\$118,700.00		-34	ERROR
87-B-4796	DORE & ASS	Y		\$214,400.00	\$118,700.00		81	ERROR
87-B-4796	DUALL INC.	Y		\$170,646.00	\$118,700.00		44	ERROR
87-B-4796	FALCON ASS	Y		\$60,350.00	\$118,700.00		-32	ERROR
87-B-4796	HAZARDOUS	Y		\$180,000.00	\$118,700.00		52	ERROR
87-B-4796	NAACO	Y		\$200,295.00	\$118,700.00		69	ERROR
87-B-4796	PROJECT DE	Y		\$98,700.00	\$118,700.00		-25	ERROR
87-B-4796	SEAGULL EN	Y		\$98,472.00	\$118,700.00		-17	ERROR
87-B-4797	OPC BENERA	Y		\$109,938.00	\$81,000.00		36	ERROR
87-B-4797	DUALL INC.	Y		\$70,050.00	\$81,000.00		-14	ERROR
87-B-4797	FALCON ASS	Y		\$66,400.00	\$81,000.00		-18	ERROR
87-B-4797	HAZARDOUS	Y		\$150,000.00	\$81,000.00		85	ERROR
87-B-4797	PROJECT DE	Y		\$87,000.00	\$81,000.00		7	ERROR
87-B-4799	HAMPTON EE	Y		\$235,900.00	\$179,832.00		31	ERROR
87-B-4799	MAGNUM INC	Y		\$207,224.00	\$179,832.00		15	ERROR
87-B-4799	MIBO CONST	Y		\$185,243.00	\$179,832.00		3	ERROR
87-B-4799	PARKS & BI	Y		\$224,511.00	\$179,832.00		25	ERROR
87-B-4799	RANCO CONS	Y		\$192,100.00	\$179,832.00		7	ERROR
87-B-4799	ROBERT G R	Y		\$279,215.00	\$179,832.00		55	ERROR
87-B-5000	EDGELY AIR	?		\$93,081.00	\$58,000.00		60	ERROR
87-B-5000	EDGELY AIR	?		\$93,081.00	\$58,000.00		60	ERROR
87-B-5325	D'STEENS C	Y		\$14,999.00	\$22,114.00		-32	ERROR
87-B-5325	RANCO CONS	Y		\$21,820.00	\$22,114.00		-1	ERROR
87-B-5325	EASTERN AT	Y		\$24,923.00	\$22,114.00		13	ERROR
87-B-5325	HAMPTON BC	Y		\$23,700.00	\$22,114.00		7	ERROR
87-B-5325	GAUCELL ER	Y		\$21,800.00	\$22,114.00		-1	ERROR
87-B-5350	G.T. PAINT	Y		\$249,000.00	\$183,000.00	\$89,150.00	36	179
87-B-5350	JLT PAINTI	Y		\$117,000.00	\$183,000.00	\$89,150.00	-36	31
87-B-5350	HYDRADE PA	Y		\$103,697.00	\$183,000.00	\$89,150.00	-43	16
87-B-5350	AIG PAINTI	Y		\$89,150.00	\$183,000.00	\$89,150.00	-51	0
87-B-5350	PRO-SPEC P	Y		\$202,913.00	\$183,000.00	\$89,150.00	11	128
87-B-5350	GIA GENERA	Y		\$195,000.00	\$183,000.00	\$89,150.00	7	113
87-B-5350	STAFERITE	Y		\$144,000.00	\$183,000.00	\$89,150.00	-21	62
87-B-5350	ATHAN CONT	Y		\$139,000.00	\$183,000.00	\$89,150.00	-24	55
87-B-5350	CONSTANTIN	Y		\$183,887.00	\$183,000.00	\$89,150.00	4	113
87-B-5350	PNW CONSTR	Y		\$178,227.00	\$183,000.00	\$89,150.00	-3	100
87-B-5350	OLYESIA PAI	Y		\$163,000.00	\$183,000.00	\$89,150.00	-11	83
87-B-5350	CAESAR CON	Y		\$112,000.00	\$183,000.00	\$89,150.00	-39	26
87-B-5641	ACE SERVIC	N		\$825,792.00			ERROR	ERROR
87-B-5641	ACTION MAI	Y		\$915,000.00			ERROR	ERROR



CONTRACT#	OFFEROR	SB	S.D.B	BID	GOV'T EST	AWARD PRICE	% OF GOV'	% OF AWA
87-B-5641	ALPHA MAT	Y		\$975,732.00			ERROR	ERROR
87-B-5641	ATLANTIC M	Y		\$1,352,796.00			ERROR	ERROR
87-B-5641	C PROFESSI	Y		\$1,320,887.06			ERROR	ERROR
87-B-5641	DUTCH BOYS	Y		\$922,507.00			ERROR	ERROR
87-B-5641	E & V CLEA	Y		\$1,071,531.00			ERROR	ERROR
87-B-5641	GOLDEN BEE	Y		\$684,088.00			ERROR	ERROR
87-B-5641	GOVT OPERA	Y		\$1,151,085.00			ERROR	ERROR
87-B-5641	MELSON MAT	Y		\$718,306.22			ERROR	ERROR
87-B-5641	STATEWIDE	Y		\$97,803.00			ERROR	ERROR
87-B-5641	SVC CONTROL	Y		\$309,404.00			ERROR	ERROR
87-B-5641	THE ALDEN	?		\$875,666.00			ERROR	ERROR
87-B-5641	CYCLO BLDG	Y	Y	\$720,323.00			ERROR	ERROR
87-B-5644	J J ANDERS	Y		\$107,060.00	\$119,000.00	\$107,060.00	-10	0
87-B-5644	JAS PROLIN	Y		\$149,000.00	\$119,000.00	\$107,060.00	25	39
87-B-5644	JOHN J DOU	Y		\$175,000.00	\$119,000.00	\$107,060.00	47	63
87-B-5644	PALAFIS CO	Y		\$111,600.00	\$119,000.00	\$107,060.00	-6	4
87-B-5935	LABOR INC	Y		\$900,400.00	\$626,000.00		9	ERROR
87-B-5935	LOSAR INC	Y		\$900,400.00	\$826,000.00		9	ERROR
87-B-5956	SKONES ADV	Y		\$2,431.00	\$2,170.00		12	ERROR
87-B-5957	SKONES ADV	Y		\$2,431.00	\$2,170.00		12	ERROR
87-B-5957	MILLER-PIC	Y		\$2,480.00	\$2,170.00		14	ERROR
87-B-5958	EMMORTON E	Y		\$9,964.50	\$8,670.00		15	ERROR
87-B-5958	POWER SYST	Y		\$13,670.00	\$8,670.00		58	ERROR
87-B-5958	POWER TECH	Y		\$5,490.00	\$8,670.00		-37	ERROR
87-B-5958	MET ELECTR	Y		\$11,735.00	\$8,670.00		35	ERROR
87-B-5958	MICROBAC I	Y		\$16,170.00	\$8,670.00		87	ERROR
87-B-7011	NEIDIGH CO	Y		\$115,931.00	\$93,950.00		23	ERROR
87-B-7011	TREILO BLD	Y		\$99,659.00	\$93,950.00		-25	ERROR
87-B-7058	LINSEY LU	Y		\$263,881.00	\$267,000.00	\$235,168.00	-1	12
87-B-7058	GAMES GEN	Y		\$259,000.00	\$267,000.00	\$235,168.00	-5	8
87-B-7058	NEIDIGH CO	Y		\$254,957.00	\$267,000.00	\$235,168.00	-5	8
87-B-7058	TEG CONST	Y		\$235,168.00	\$267,000.00	\$235,168.00	-12	0
87-B-7072	LYNN CONST	Y		\$123,315.00	\$94,780.00		30	ERROR
87-B-7072	NIDIGH CON	Y		\$106,451.00	\$94,780.00		12	ERROR
87-B-7084	LINSEY LU	Y		\$128,208.00	\$93,950.00		37	ERROR
87-B-7084	NEIDIGH CO	Y		\$136,950.00	\$93,950.00		46	ERROR
87-B-7085	GRAVES PLB	Y		\$96,858.00	\$86,700.00		0	ERROR
87-B-7085	LINSEYS I	Y		\$77,124.00	\$86,700.00		-11	ERROR
87-B-7085	STREICHER	Y		\$84,113.00	\$86,700.00		-3	ERROR
87-B-7085	FEERLESS P	Y		\$191,567.00	\$86,700.00		121	ERROR
87-B-7085	NEIDIGH CO	Y		\$78,449.00	\$86,700.00		-10	ERROR
87-B-7115	C & S CONS	Y		\$116,110.00	\$30,040.00	\$32,798.00	287	254
87-B-7115	TEL-VI COM	Y		\$35,474.00	\$30,040.00	\$32,798.00	18	8
87-B-7115	MOORE & AR	Y		\$32,789.00	\$30,040.00	\$32,798.00	9	-0
87-B-7115	MAS CABLE	Y		\$45,088.00	\$30,040.00	\$32,798.00	63	50
87-B-7115	JON POWELL	Y		\$17,705.00	\$30,040.00	\$32,798.00	-41	-46
87-B-7151	NEIDIGH CO	Y		\$97,550.00	\$72,000.00	\$67,698.00	35	44
87-B-7151	LYND CONST	Y		\$88,416.00	\$72,000.00	\$67,698.00	23	31
87-B-7151	TRI CO BUI	Y		\$51,900.00	\$72,000.00	\$67,698.00	14	21
87-B-7151	LINSEY LU	Y		\$97,195.00	\$72,000.00	\$67,698.00	35	44
87-B-7151	T & G CONS	Y		\$67,698.00	\$72,000.00	\$67,698.00	-6	0
87-B-7156	FLEETWOOD	Y		\$49,971.00	\$31,813.00	\$23,990.00	54	104



CONTRACT#	OFFEROR	SB	S.D.B	BID	GOV'T EST	AWARD PRICE	%OF GOV'	% OF AWA
87-B-7156	?	Y		\$13,990.00	\$31,813.00	\$23,990.00	-25	0
87-B-7156	?	Y		\$32,323.00	\$31,813.00	\$23,990.00	-2	35
87-B-7156	?	Y		\$27,900.00	\$31,813.00	\$23,990.00	-12	16
87-B-7156	?	Y		\$38,400.00	\$31,813.00	\$23,990.00	21	60
87-B-7208	F E HARDIN	Y		\$305,000.00	\$415,519.64	\$256,000.00	-27	19
87-B-7208	INDIANA AS	Y		\$264,000.00	\$415,519.64	\$256,000.00	-36	3
87-B-7208	MOELLERING	Y		\$256,000.00	\$415,519.64	\$256,000.00	-38	0
87-B-7210	BROCK ELEC	Y		\$87,220.00	\$97,075.00	\$42,500.00	-10	105
87-B-7210	FOUR SEASO	Y		\$65,444.00	\$97,075.00	\$42,500.00	-33	54
87-B-7210	FOUR-SEASO	Y		\$65,444.00	\$97,075.00	\$42,500.00	-33	54
87-B-7210	INTERGRATE	Y		\$53,512.00	\$97,075.00	\$42,500.00	-45	26
87-B-7210	NFTCON	Y		\$42,500.00	\$97,075.00	\$42,500.00	-56	0
87-B-7210	Brock Elec	Y	?	\$87,220.00	\$97,075.00	\$42,500.00	-10	105
87-B-7210	Four Seaso	Y	?	\$65,444.00	\$97,075.00	\$42,500.00	-33	54
87-B-7210	Intergrate	Y	?	\$53,512.00	\$97,075.00	\$42,500.00	-45	26
87-B-7210	NFTCON	Y	?	\$42,500.00	\$97,075.00	\$42,500.00	-56	0
87-B-7210	NFTCON	Y	N	\$42,500.00	\$97,075.00	\$42,500.00	-56	0
87-B-7238	BARNES ELE	Y		\$159,750.00	\$149,860.00	\$187,818.00	33	6
87-B-7238	CULLING EL	Y		\$153,866.00	\$149,860.00	\$187,818.00	23	-2
87-B-7238	D L WOODS	Y		\$257,980.00	\$149,860.00	\$187,818.00	72	37
87-B-7238	ELECTRIC P	Y		\$187,818.00	\$149,860.00	\$187,818.00	25	0
87-B-7247	GINSHAU RD	Y		\$448,800.00	\$663,744.60	\$448,780.00	-32	0
87-B-7247	NU-SEC RDG	Y		\$652,160.00	\$663,744.60	\$448,780.00	-2	45
87-B-7247	TERSTEP RD	Y		\$448,700.00	\$663,744.60	\$448,780.00	-32	0
87-B-7247	THE GUFF S	Y		\$646,300.00	\$663,744.60	\$448,780.00	-2	44
87-B-7264	C.M.A CORP	Y		\$89,636.00	\$101,689.00	\$96,538.00	-18	-13
87-B-7264	DADUA & AS	Y		\$119,964.00	\$101,689.00	\$96,538.00	18	24
87-B-7264	FOUR SEASO	Y		\$149,444.00	\$101,689.00	\$96,538.00	47	55
87-B-7264	JUD CONSTR	Y		\$128,666.00	\$101,689.00	\$96,538.00	27	33
87-B-7264	LOUIS LIND	Y		\$56,532.00	\$101,689.00	\$96,538.00	-5	0
87-B-7264	MYLAR & NA	Y		\$105,207.00	\$101,689.00	\$96,538.00	3	9
87-B-7264	S.C. NESTE	Y		\$97,444.00	\$101,689.00	\$96,538.00	-4	1
87-B-7263	THE ELLIS	Y		\$112,310.00	\$95,527.00	\$112,310.00	18	0
87-B-7378	ALDRIODE E	Y		\$42,100.00	\$55,793.00		-25	ERROR
87-B-7378	ARLINGTON	Y		\$89,058.00	\$55,793.00		60	ERROR
87-B-7378	GERSON ELE	Y		\$77,700.00	\$55,793.00		39	ERROR
87-B-7378	H.V. ALLEN	Y		\$65,300.00	\$55,793.00		53	ERROR
87-B-7378	LION ELEC	Y		\$54,945.00	\$55,793.00		70	ERROR
87-B-7378	MARS ELEC	Y		\$86,694.00	\$55,793.00		59	ERROR
87-B-7378	NYOAN CONS	Y		\$41,087.00	\$55,793.00		-26	ERROR
87-B-7379	BETHLEHEM	Y		\$46,900.00	\$47,089.50		-0	ERROR
87-B-7379	CAM ELEC C	Y		\$1,560.00	\$47,089.50		-97	ERROR
87-B-7379	KOVILIC CO	Y		\$58,532.00	\$47,089.50		24	ERROR
87-B-7379	NAT'L CONS	Y		\$52,574.00	\$47,089.50		12	ERROR
87-B-7379	PRO TECH S	Y		\$44,500.00	\$47,089.50		-5	ERROR
87-B-7700	ELITE ROOF	Y		\$187,000.00	\$217,420.00		-14	ERROR
87-B-7700	KOVILIC CO	Y		\$221,147.00	\$217,420.00		2	ERROR
87-B-7700	BETHLEHEM	Y		\$175,050.00	\$217,420.00		-17	ERROR
87-B-7700	JETCO	Y		\$150,860.00	\$217,420.00		-27	ERROR
87-B-7700	BENNETTA B	?		\$170,500.00	\$217,420.00		-22	ERROR
87-B-7700	E H WOODS	Y		\$217,973.00	\$217,420.00		0	ERROR
87-B-7700	PROTECK SY	Y		\$243,700.00	\$217,420.00		12	ERROR



CONTRACT#	OFFEROR	SB	S.D.B	BID	GOV'T EST	AWARD PRICE	% OF GOV'	% OF AWA
87-B-7700	CROWTHER E	Y		\$186,000.00	\$217,420.00		-14	ERROR
87-B-7700	MW EHRLANZ	Y		\$173,659.00	\$217,420.00		-20	ERROR
87-B-7700	AMERICAN R	Y		\$189,772.00	\$217,420.00		-13	ERROR
87-B-7702	POWER SYST			\$24,585.00	\$40,000.00		-39	ERROR
87-B-7702	BC ELECTRI			\$35,269.00	\$40,000.00		-12	ERROR
87-B-7702	WESTINGHOU			\$25,700.00	\$40,000.00		-26	ERROR
87-B-7702	ALD-CASS E			\$57,500.00	\$40,000.00		44	ERROR
87-B-7713	INDUSTRIAL			\$551,000.00	\$603,500.00		-9	ERROR
87-B-7713	BLEUDZIERS			\$727,400.00	\$603,500.00		21	ERROR
87-B-7713	VASAN ENTE			\$836,820.00	\$603,500.00		37	ERROR
87-B-7713	FILEY CONS			\$663,402.00	\$603,500.00		10	ERROR
87-B-7713	BLINDERMAN			\$698,795.00	\$603,500.00		16	ERROR
87-B-7713	MARINO CON			\$693,450.00	\$603,500.00		15	ERROR
87-B-7713	RITE-WAY L			\$871,548.00	\$603,500.00		44	ERROR
87-B-7720	WELKS ENTE	Y		\$24,500.00	\$25,245.00		-3	ERROR
87-B-7720	TMI COATIN	Y		\$35,425.00	\$25,245.00		56	ERROR
87-B-7720	UNIVERSAL	Y		\$37,313.00	\$25,245.00		48	ERROR
87-B-7720	A K SEAMLE	?		\$24,915.00	\$25,245.00		-1	ERROR
87-B-7720	ANDREW LAN	Y		\$68,000.00	\$25,245.00		169	ERROR
87-B-7720	ENERGY SHI	Y		\$32,575.00	\$25,245.00		29	ERROR
87-B-7720	WEATHER SY	Y		\$23,800.00	\$25,245.00		-6	ERROR
87-B-7723	GLACIER PA	Y		\$54,445.00	\$85,344.00		-36	ERROR
87-B-7723	NORTHLAND	Y		\$50,300.00	\$85,344.00		-40	ERROR
87-B-7731	MAXIMUM PR	Y		\$340,226.75			ERROR	ERROR
87-B-7731	ARLINGTON	Y		\$463,148.25			ERROR	ERROR
87-B-7731	BI-STATE S	Y		\$471,375.00			ERROR	ERROR
87-B-7731	SHEEHY SPE	Y		\$449,582.48			ERROR	ERROR
87-B-7731	ATLANTIC P	Y		\$413,658.00			ERROR	ERROR
87-B-7731	EAST CONTI	Y		\$510,161.00			ERROR	ERROR
87-B-7731	GLOSS GUAR	Y		\$298,486.75			ERROR	ERROR
87-B-7731	EASTERN MA	Y		\$467,469.00			ERROR	ERROR
87-B-7731	SECURITY S	Y		\$571,930.00			ERROR	ERROR
87-B-7731	RANDOM PRO	Y		\$597,473.55			ERROR	ERROR
87-B-7731	S.T. & T SP	Y		\$767,500.00			ERROR	ERROR
87-B-7731	GRIFFIN SE	Y		\$445,279.85			ERROR	ERROR
87-B-7731	BUSINESS S	Y		\$475,103.00			ERROR	ERROR
87-B-7731	THE SWANSD	Y		\$447,650.18			ERROR	ERROR
87-B-7732	ARLINGTON	?		\$205,000.00	\$160,202.00		30	ERROR
87-B-7732	MARKHAM EL	?		\$205,000.00	\$160,202.00		28	ERROR
87-B-7732	OPTIMUN CO	?		\$237,788.00	\$160,202.00		48	ERROR
87-B-7732	WESTINGHOU	?		\$219,875.00	\$160,202.00		37	ERROR
87-B-7737	AQUA FREP			\$4,150.00			ERROR	ERROR
87-B-7737	DUBOIS CHE			\$70,253.42			ERROR	ERROR
87-B-7737	HOTT CHEMI			\$16,724.00			ERROR	ERROR
87-B-7738	FIRST IMPR			\$14,700.00	\$42,000.00		6	ERROR
87-B-7738	MC SPORT S			\$45,922.00	\$42,000.00		9	ERROR
87-B-7741	AMERICAN C	?		\$47,480.00	\$45,287.00		5	ERROR
87-B-7741	ENERGY SAV	?		\$24,944.00	\$45,287.00		-45	ERROR
87-B-7741	Gerald T.	Y		\$58,700.00	\$45,287.00		30	ERROR
87-B-7741	JAMES MARE	?		\$49,483.59	\$45,287.00		9	ERROR
87-B-7741	JAYEIL IND	?		\$36,984.87	\$45,287.00		-18	ERROR
87-B-7741	LYBURN CON	?		\$62,500.00	\$45,287.00		38	ERROR



CONTRACT#	OFFEROR	SB	S.D.B	BID	GOV'T EST	AWARD PRICE	% OF gOV'	% OF AWA
87-B-7741	PARRIS & A	?		\$24,900.00	\$45,287.00		-45	ERROR
87-B-7741	STATE INSU	?		\$34,500.00	\$45,287.00		-23	ERROR
87-B-7747	ALINGTON E	?		\$356,747.00	\$108,914.00		228	ERROR
87-B-7747	CREST SOUT	?		\$163,950.00	\$108,914.00		51	ERROR
87-B-7747	INTEGRATED	?		\$140,945.00	\$108,914.00		29	ERROR
87-B-7747	JCN MAINT	?		\$168,270.25	\$108,914.00		55	ERROR
87-B-7747	MARQUEZ EL	?		\$240,915.00	\$108,914.00		121	ERROR
87-B-7747	MILL VALLE	?		\$295,698.00	\$108,914.00		171	ERROR
87-B-7747	W H REED C	?		\$168,237.00	\$108,914.00		54	ERROR
87-B-7748	SUNRUNNER	Y		\$23,300.00	\$67,195.00		-73	ERROR
87-B-7748	LAMBERT IN	?		\$24,957.92	\$87,195.00		-71	ERROR
87-B-7748	STAGER CON	?		\$24,875.00	\$87,195.00		-71	ERROR
87-B-7748	PHILLIPS N	?		\$24,850.00	\$87,195.00		-72	ERROR
87-B-7748	FOUR STAR	?		\$44,752.00	\$87,195.00		-49	ERROR
87-B-7748	ARLINGTON	?		\$73,450.00	\$87,195.00		-16	ERROR
87-B-7748	W H REED C	?		\$27,880.00	\$87,195.00		-68	ERROR
87-B-7748	MILL VALLE	?		\$57,050.00	\$87,195.00		-35	ERROR
87-B-7748	INTEGREATED	N		\$30,130.00	\$87,195.00		-65	ERROR
87-B-7748	AMERICAN C	Y		\$28,455.00	\$87,195.00		-67	ERROR
87-B-7748	CREST SOUT	Y		\$24,235.00	\$87,195.00		-72	ERROR
87-B-7748	SEPT AR	Y		\$16,075.00	\$87,195.00		-82	ERROR
87-B-7748	JCN MAINT	Y		\$23,682.00	\$87,195.00		-73	ERROR
87-B-7748	MARQUEZ EL	Y		\$47,450.00	\$87,195.00		-46	ERROR
87-B-7758	CENTURY AU	Y		\$96,000.00	\$88,000.00		9	ERROR
87-B-7758	H V ALLEN	Y		\$118,600.00	\$88,000.00		35	ERROR
87-B-7758	SOMERS CO	Y		\$105,900.00	\$88,000.00		20	ERROR
87-B-7760	HOD DISPOS			\$410,840.00			ERROR	ERROR
87-B-7760	BEST SCAVE			\$411,063.81			ERROR	ERROR
87-B-7760	HODD BROS			\$360,367.24			ERROR	ERROR
87-B-7760	NORTH SHOR			\$475,242.40			ERROR	ERROR
87-B-7763	HODD BROS			\$161,382.56			ERROR	ERROR
87-B-7763	HOD DISP S			\$159,829.93			ERROR	ERROR
87-B-7763	BEST SCAVE			\$197,657.10			ERROR	ERROR
87-B-7763	ACE DISP S			\$211,876.00			ERROR	ERROR
87-B-7763	NORTH SHOR			\$189,703.89			ERROR	ERROR
87-B-7765	ALLIED BLA	Y		\$60,384.40	\$25,000.00		142	ERROR
87-B-7765	ALLIED BLA	Y		\$60,384.40	\$25,000.00		142	ERROR
87-B-7765	BITUMIDUS	N		\$25,368.00	\$25,000.00		1	ERROR
87-B-7765	BITUMIDUS	N		\$25,368.00	\$25,000.00		1	ERROR
87-B-7768	MERIDIAN C	Y		\$153,200.00	\$103,889.89		47	ERROR
87-B-7773	BENNETT L	?		\$307,000.00	\$318,159.00		-4	ERROR
87-B-7773	E H WOODS	?		\$252,425.00	\$318,159.00		-21	ERROR
87-B-7773	ELITE ROOF	N		\$276,000.00	\$318,159.00		-13	ERROR
87-B-7773	KOVILIC CO	?		\$396,795.00	\$318,159.00		25	ERROR
87-B-7773	M M SCHRAZ	?		\$257,495.00	\$318,159.00		-19	ERROR
87-B-7776	J H EDUMAN	Y		\$45,653.00	\$51,845.00		-12	ERROR
87-B-7776	J H EDUMAN	Y		\$45,653.00	\$51,845.00		-12	ERROR
87-B-7776	SEGA INC	Y		\$54,327.96	\$51,845.00		5	ERROR
87-B-7776	SEGA INC.	Y		\$54,327.96	\$51,845.00		5	ERROR
87-B-7777	F.D. & L.			\$94,116.00	\$93,100.00		1	ERROR
87-B-7777	KENNEDY HT			\$99,795.00	\$93,100.00		7	ERROR
87-B-7777	G.C. SHAW			\$119,137.00	\$93,100.00		28	ERROR



CONTRACT#	OFFEROR	SB	S.D.B	BID	GOV'T EST	AWARD PRICE	% OF Gov't	% OF AWA
87-B-7777	ST. LOUIS	Y		\$106,306.00	\$93,100.00		14	ERROR
87-B-7777	LEE MECHAN			\$128,454.00	\$93,100.00		38	ERROR
87-B-7777	HEATROL SE	Y		\$121,814.00	\$93,100.00		31	ERROR
87-B-7777	AIR MASTER	Y		\$128,493.00	\$93,100.00		30	ERROR
87-B-7777	F A ENTERP	Y		\$106,865.00	\$93,100.00		15	ERROR
87-B-7781	BENNETTA B	N		\$194,866.00	\$386,965.00	\$194,866.00	-50	0
87-B-7781	CROTHER EN	N		\$292,500.00	\$386,965.00	\$194,866.00	-40	19
87-B-7781	DUNCAN & S	N		\$228,792.00	\$386,965.00	\$194,866.00	-41	17
87-B-7781	E & H WOOD	N		\$247,060.00	\$386,965.00	\$194,866.00	-36	27
87-B-7781	ELITE ROOF	Y		\$197,629.00	\$386,965.00	\$194,866.00	-49	1
87-B-7781	KOVILIC CO	N		\$352,792.00	\$386,965.00	\$194,866.00	-9	81
87-B-7781	MM OCHRANZ	N		\$246,744.00	\$386,965.00	\$194,866.00	-36	27
87-B-7781	SPECIALITY	N		\$220,970.00	\$386,965.00	\$194,866.00	-43	13
87-B-7781	VALSDORF R	N		\$242,000.00	\$386,965.00	\$194,866.00	-37	24
87-B-7790	GEORGE C.	Y		\$87,000.00	\$52,891.00		64	ERROR
87-B-7790	R. E. SMIT	Y		\$100,000.00	\$52,891.00		89	ERROR
87-B-7790	DALTON KIL	Y		\$35,883.00	\$52,891.00		-33	ERROR
87-B-7790	CONSTRUCTI	Y		\$81,725.00	\$52,891.00		55	ERROR
87-B-7790	ASTUTE ENE	Y		\$24,307.00	\$52,891.00		-54	ERROR
87-B-7792	KOVILIC CO	Y		\$67,750.00	\$39,000.00		74	ERROR
87-B-7792	MERIDIAN C	Y		\$59,690.00	\$39,000.00		53	ERROR
87-B-7801	AODE SERVI	N		\$78,800.00			ERROR	ERROR
87-B-7801	ECOTURE IN	N		\$158,473.40			ERROR	ERROR
87-B-8130	BAYFIELD C	Y		\$100,850.00	\$62,521.88		61	ERROR
87-B-8130	HOPFMAN &	Y		\$69,380.00	\$62,521.88		11	ERROR
87-B-8130	HOWARD J.	Y		\$69,690.00	\$62,521.88		43	ERROR
87-B-8130	OSCAR BERG	Y		\$96,912.00	\$62,521.88		54	ERROR
87-B-8130	PARIS CONT	Y		\$91,950.00	\$62,521.88		31	ERROR
87-B-8130	SOMERS CO	Y	Y	\$115,135.00	\$62,521.88		84	ERROR
87-B-8131	HOFFMAN &	Y		\$0.00	\$65,259.00		-100	ERROR
87-B-8131	JOEL KENNE	Y		\$138,300.00	\$65,255.00		112	ERROR
87-B-8131	A & K CONS	Y	Y	\$65,000.00	\$65,255.00		6	ERROR
87-B-8240	LYMER CONS	Y		\$46,785.00	\$36,400.00	\$30,989.00	29	51
87-B-8240	T & G CONS	Y		\$30,985.00	\$36,400.00	\$30,989.00	-15	0
87-B-8244	GRAVES PLB	Y		\$63,586.00	\$60,600.00	\$55,400.00	5	15
87-B-8244	TRI COUNTY	Y		\$55,400.00	\$60,600.00	\$55,400.00	-9	0
87-B-8244	NEIDIGH CO	Y		\$59,689.00	\$60,600.00	\$55,400.00	-2	8
87-B-8244	MOORE HTG	Y		\$78,499.00	\$60,600.00	\$55,400.00	30	42
87-B-8244	SARGENT CO	Y		\$58,134.00	\$60,600.00	\$55,400.00	-4	5
87-B-8264	MESKINA	Y		\$336,745.00	\$347,400.00		-3	ERROR
87-B-8264	GRAVES PLU	Y		\$304,304.00	\$347,400.00		-12	ERROR
87-B-8264	PEERLESS P	Y		\$464,464.00	\$347,400.00		34	ERROR
87-B-8264	HARRELL ME	Y		\$315,664.00	\$347,400.00		-9	ERROR
87-B-8264	MOORE HTG	Y		\$303,398.00	\$347,400.00		-2	ERROR
87-B-8264	TRIANGLE S	Y		\$325,745.00	\$347,400.00		-6	ERROR
87-B-8264	FEERLESS P	Y		\$379,973.00	\$379,227.00		0	ERROR
87-B-8298	DARHOLZ EX	Y		\$183,688.00	\$305,600.00		-40	ERROR
87-B-8298	SAM OXLEY	Y		\$169,483.00	\$305,600.00		-45	ERROR
87-B-8298	W. D. BARTL	Y		\$189,435.90	\$305,600.00		-38	ERROR
87-B-8298	DAVID ENG	Y		\$253,000.00	\$305,600.00		-17	ERROR
87-C-4702	OPTIMUM CO	Y		\$44,838.00	\$30,740.00		46	ERROR
87-C-4702	ROB G RIPP	Y		\$78,215.00	\$30,740.00		154	ERROR



CONTRACT#	OFFEROR	SB	S.O.B	BID	GOV'T EST	AWARD PRICE	% OF GOV'	% OF AWA
87-C-5007	FLETCHER-H	Y		\$269,065.00	\$184,549.00		46	ERROR
87-C-5007	PARKS & BI	Y		\$247,211.00	\$184,549.00		34	ERROR
87-C-5007	RIFPER INC	Y		\$248,111.00	\$184,549.00		34	ERROR
87-C-5008	MIEG CONST	Y		\$256,394.00	\$184,549.00		33	ERROR
87-C-5008	MAGNUM INC	Y		\$322,294.00	\$184,549.00		75	ERROR
87-C-5008	PNM CONST	Y		\$169,645.00	\$184,549.00		3	ERROR
87-C-7770	MET CEN	?		\$35,003.00	\$34,500.00		1	ERROR
87-C-7770	STEEL STRU	Y		\$34,990.00	\$34,500.00		1	ERROR
87-D-2642	NAT'L CORP	Y		\$14,350.00			ERROR	ERROR
87-D-3408	MAXIMUM PR	N		\$230,732.00			ERROR	ERROR
87-D-3408	COMMAND SE	Y		\$184,550.00			ERROR	ERROR
87-D-3408	THE SWANCO	Y		\$169,973.44			ERROR	ERROR
87-D-3408	RELIANCE C	Y		\$174,326.00			ERROR	ERROR
88-E-0013	J.L.L. NAPIN	Y		\$2,947,000.00	\$2,831,000.00		4	ERROR
88-E-0013	CARLIN CON	Y		\$9,056,903.00	\$2,831,000.00		3	ERROR
88-E-0013	C.P. KLEWI	Y		\$321,890.00	\$2,831,000.00		-69	ERROR
88-E-0297	WM F. GAVI	Y		\$193,908.00	\$206,200.00		-6	ERROR
88-E-0297	GASTAR COR	Y		\$196,000.00	\$206,200.00		-5	ERROR
88-E-0297	DANTE'S CO	Y		\$134,265.00	\$206,200.00		-35	ERROR
88-E-0297	MAGNUM INC	Y		\$151,000.00	\$206,200.00		-27	ERROR
88-E-0297	PIONEER CO	Y		\$173,000.00	\$206,200.00		-15	ERROR
88-E-0297	FARINELLI	Y		\$219,832.00	\$206,200.00		7	ERROR
88-E-0297	SENWALT IN	Y		\$117,840.00	\$206,200.00		-43	ERROR
88-E-0297	WLF DICKI	Y		\$143,740.00	\$206,200.00		-28	ERROR
88-E-0297	COUNSEL CO	Y		\$153,200.00	\$206,200.00		-26	ERROR
88-E-5101	PYRD INST	Y		\$129,352.00	\$103,590.42		25	ERROR
88-E-5101	J.P. MECHA	Y		\$158,265.00	\$103,590.42		53	ERROR
88-E-5101	ASSOCIATED	Y		\$128,700.00	\$103,590.42		24	ERROR
88-E-5101	DEL-VAL ME	Y		\$177,181.00	\$103,590.42		71	ERROR
88-E-5101	F.M. NORTH	Y		\$129,517.00	\$103,590.42		25	ERROR
88-E-5101	PETERSON S	Y		\$149,290.00	\$103,590.42		44	ERROR
88-E-5101	SCHEAFFER	Y		\$84,496.00	\$103,590.42		-18	ERROR
88-E-5101	ACME PLMG	Y		\$121,481.00	\$103,590.42		17	ERROR
88-E-5101	H.V. ALLEN	Y		\$171,000.00	\$103,590.42		65	ERROR
88-E-5101	K.H.M. DSG	Y		\$177,400.00	\$103,590.42		71	ERROR
88-E-5101	F.W. VESPE	Y		\$112,000.00	\$103,590.42		8	ERROR
88-E-5101	SARED INC	Y		\$89,999.00	\$103,590.42		-13	ERROR
88-E-5101	TAMI-SITHE	Y		\$131,500.00	\$103,590.42		27	ERROR
B-7701	SERVICE CO	Y		\$5,808.00			ERROR	ERROR
B-7701	MINE MAID	Y		\$25,918.00			ERROR	ERROR
B-7701	? ENGINEER	N		\$4,696.74			ERROR	ERROR
B-7701	JADE SERVI	N		\$14,498.65			ERROR	ERROR
B-7701	INTEGRITY	N		\$29,927.00			ERROR	ERROR
B-7701	?	N		\$11,212.25			ERROR	ERROR
B-7701	THE ENTON	Y		\$23,104.80			ERROR	ERROR
B-7701	INDUSTRIAL	N		\$23,920.15			ERROR	ERROR



**APPENDIX F**  
**CONTRACT GROWTH ANALYSIS**



CONTRACT GROWTH  
TITLE II  
CONTRACTS.

FROM: NORTHDIV CIS DATABASE

- ONLY CONTRACTS PROVEN TO BE TITLE II AWARDS
- CONTRACTS IN EXCESS OF \$10,000
- CONTRACTS CLOSED-OUT PRIOR TO 30 JUN 1988
- OBVIOUS CUSTOMER REQUESTED CHANGES WERE ELIMINATED

$$N = 74 \text{ Contracts} \quad \sum x^2 = 3380$$

$$\sum x = 328 \text{ changes} \quad (\sum x)^2 = 107584$$

$$\bar{x} = \frac{328}{74} = 4.4 \text{ Changes/contract}$$

$$S^2 = \frac{3380 - \frac{107584}{74}}{73} = 26.38$$

$$S = 5.14$$

NUMBER OF  
CHANGES

- CALCULATED AS:  $\frac{\sum \frac{\$ \text{ INCREASE}}{\$ \text{ BID}}}{\sum \# \text{ CONTRACTS}} \times 100\%$

$$n = 74 \quad \sum x^2 = 1822.13$$

$$\sum x = 169.32 \quad (\sum x)^2 = 28669.26$$

$$\bar{x} = \frac{169.32}{74} = 2.29 \% \text{ of Bid Price}$$

$$S^2 = \frac{1822.13 - \frac{28669.26}{74}}{73}$$

$$S = 19.65$$

$$S = 4.43$$

AVERAGE CONTRACT  
\$ GROWTH

- AVERAGE CONTRACT COST \$885,000

$$\bullet \text{Average Modification} = \frac{0.0229(885,000)}{4.4} = \$4606$$



CONTRACT GROWTH  
UNRESTRICTED  
COMPETITION

FROM: NORTHERN DIVISION CMS DATABASE 1981-1988

- ONLY CONTRACTS PROVEN TO BE AWARDED TO LARGE BUSINESSES WERE INCLUDED IN ANALYSIS. SEVERAL WERE ADVERTISED AS UNRESTRICTED BUT WERE AWARDED TO SMALL BUSINESS
- ALL CONTRACTS HAVING QUESTIONABLE CHANGES (CUSTOMER REQUESTED AND REDUCED SCOPE TO STAY WITHIN FUNDING) WERE NOT INCLUDED IN THE ANALYSIS
- AVERAGE CONTRACT COST \$ 3.6 Million

AVERAGE CONTRACT  
\$ GROWTH

$$n = 23$$

$$\sum x^2 = 2620.56$$

$$\sum x = 157.82$$

$$(\sum x)^2 = 24907$$

$$\bar{x} = 6.86\% \text{ of Award Price}$$

$$s^2 = \frac{2620.56 - \frac{24907}{23}}{22} = 69.89$$

$$s = 8.36$$

NUMBER OF  
CHANGES

$$n = 23 \text{ Contracts}$$

$$\sum x^2 = 9103$$

$$\sum x = 323 \text{ Changes}$$

$$(\sum x)^2 = 104329$$

$$\bar{x} = \frac{323}{23} = 14 \text{ changes per Cont.}$$

$$s^2 = \frac{9103 - \frac{104329}{23}}{22} = 207.6$$

$$s = 14.4$$

AVERAGE CONTRACT COST \$ 3.60 Million

$$\text{AVERAGE MODIFICATION COST} = \frac{\$3,600,000(0.0686)}{14.4}$$

$$= \$17150$$



NUMBER	AWARD #	MOD #	# OF AWARD	GROWTH ANALYSIS		# OF MODS	# OF AGENCIES
				EX-101	EX-102		
1	245526	25561	10.93	107.87	107.87	1	1
2	13481000	412727	3.07	3.41	3.41	1	1
3	1228441	-6134	-0.50	0.25	0.25	1	1
4	1172000	28055	1.39	5.73	5.73	1	1
5	1429021	79190	0.19	30.66	30.66	1	1
6	779000	11205	1.44	2.07	2.07	1	1
7	227000	-2064	-0.51	0.83	0.83	1	1
8	3200000	47211	1.48	2.18	2.18	1	1
9	1515000	27100	1.66	2.91	2.91	1	1
10	446895	55254	12.37	152.92	152.92	1	1
11	681681	0	0.00	0.00	0.00	1	1
12	1420577	-15944	-1.12	1.29	1.29	1	1
13	1117000	2765	0.25	0.46	0.46	1	1
14	53870	0	0.00	0.00	0.00	1	1
15	129924	22000	16.96	265.70	265.70	1	1
16	1481400	38910	2.58	6.66	6.66	1	1
17	0160000	127595	7.16	51.27	51.27	1	1
18	4436840	-21385	-0.49	0.28	0.28	1	1
19	2045561	74188	3.62	19.10	19.10	1	1
20	148010	3500	2.35	9.55	9.55	1	1
21	8110817	144576	4.65	21.50	21.50	1	1
22	197300	16000	0.12	18.10	18.10	1	1
23	403808	10699	3.10	9.60	9.60	1	1
24	2778415	144563	6.64	44.04	44.04	1	1
25	236231	8778	1.50	2.56	2.56	1	1
26	48475	-245	-0.77	0.59	0.59	1	1
27	340750	16885	5.54	30.72	30.72	1	1
28	567000	6654.00	1.17	1.39	1.39	1	1
29	113000	600.00	0.50	0.28	0.28	1	1
30	254000	0.00	0.00	0.00	0.00	1	1
31	1434597	15787.00	1.05	1.19	1.19	1	1
32	973367	-8755	-1.00	1.00	1.00	1	1
33	257255	-29	-0.01	0.00	0.00	1	1
34	67800	0	0.00	0.00	0.00	1	1
35	176308	6551	2.37	5.64	5.64	1	1
36	66504	17811	17.81	320.78	320.78	1	1
37	847000	149690	16.96	287.76	287.76	1	1
38	59500	-892	-1.40	1.36	1.36	1	1
39	464587	7800	1.66	2.82	2.82	1	1
40	209000	11832	5.71	82.59	82.59	1	1
41	145000	17225	7.75	58.74	58.74	1	1



CONTRACT      GROWTH      ANALYSIS  
NUMBER      AWARD \$      MOD \$      % OF AWARD      %\$2      # OF MODS      MODS %

TITLE II CONTRACTS

(Continued)

42	197000	-11374	+6.28	35.45	0	0
43	218398	-7700	+3.53	12.43	16	100
44	727841	15213	-2.09	4.38	2	12
45	499000	6862	-0.77	1.59	1	1
46	165699	0	0.00	0.00	0	0
47	318957	10667	-3.34	11.18	0	0
48	198800	0	0.00	0.00	0	0
49	53450	0	0.00	0.00	0	0
50	196160	1791	-0.91	0.63	0	0
51	640000	18921	-2.96	8.74	0	0
52	24900	0	0.00	0.00	0	0
53	171654	177.6	-10.32	100.54	0	0
54	127190	741	-0.58	0.34	4	16
55	49423	0	0.00	0.00	0	0
56	2696000	66145	-2.45	2.02	2	10
57	198500	-6751	-1.90	2.68	0	0
58	3088000	27185	-0.88	0.78	16	100
59	464049	7870	-1.63	2.65	0	0
60	2934577	87751	-2.99	8.94	0	225
61	214127	1225	-0.57	0.33	0	0
62	955700	0	0.00	0.00	0	0
63	47640	0	0.00	0.00	0	0
64	89150	0	0.00	0.00	0	0
65	235168	0	0.00	0.00	0	0
66	32789	0	0.00	0.00	0	0
67	67690	0	0.00	0.00	0	0
68	29390	0	0.00	0.00	0	0
69	256010	7343	-3.10	9.63	0	0
70	197818	0	0.00	0.00	1	1
71	96523	-3869	-4.01	10.05	1	1
72	1112310	1900	-1.60	2.57	0	0
73	30989	0	0.00	0.00	0	0
74	58400	0	0.00	0.00	0	0

885399.99	24286.04	2.29	1622.13	929	8280
SUM X#		163.32			



NUMBER	AWARD #	MOD #	CONTRACT		GROVT-	ANALYSIS	
			% OF AWARD	UNRESTRICTED CONTRACTS		# OF MODS	MODS \$
1	5017482	623661	11.06	121.39	34	1156.00	
2	26170000	1015677	3.52	33.10	42	1764.00	
3	6840923	73957	1.09	1.17	12	144.00	
4	3768495	201821	5.39	29.07	13	169.00	
5	9938272	301702	2.16	4.57	22	523.00	
6	5591300	195167	5.23	27.87	25	625.00	
7	449308	12901	2.87	8.22	2	4.00	
8	482010	25953	6.01	35.09	8	64.00	
9	581100	76129	15.05	170.36	13	168.00	
10	417352	43966	10.53	110.99	5	25.00	
11	2652000	30850	14.63	214.14	10	100.00	
12	1157000	91172	2.67	7.13	16	255.00	
13	1125500	38604	1.81	7.91	11	121.00	
14	769166	73044	5.50	50.19	21	441.00	
15	7023195	708265	10.09	101.70	58	8364.00	
16	396000	124914	12.61	158.36	8	64.00	
17	7370000	1558055	31.71	1201.11	2	64.00	
18	193002	4192	2.17	4.72	3	5.00	
19	58100	0	0.00	0.00	1	1.00	
20	112600	-7957	-7.08	50.06	2	4.00	
21	39900	0	0.00	0.00	1	1.00	
22	128000	20454	15.98	255.35	5	25.00	
23	194866	-2582	-1.33	1.76	2	4.00	
<hr/>			3604875.95	267268.42	6.88	2620.56	223 9100.00
			SUM X=	157.82			



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE JJD IS PAST AND ACTUA-  
SOURCE: CMS EXTRACT FILE

61 RUN DATE: 27/05/83

DOLLAR RANGE OF AWARD (\$000) <

RCDS#:	DESCRIPTION	BUDG AMT	CURPRI	LAST MOD BY#
		AWARD AMOUNT	CURPRI-AWARD	
73562	INSTAL. SURGE TANK	880315	24,875	27,503 -01
.73565	SITE PREPARATION B.427 V	880321	75,155	82,437 -02
73670	RPR. T2 WASTE WATER	880423	13,000	13,900
73700	REPL. EMER EXIT DOORS	880521	15,259	15,888
73313	INSTAL. EARTH COVER	871218	13,383	13,585
73568	DRUM RACKS STORAGE AREA P	871116	12,009	12,505
73584	ASBESTOS REMOVAL	871130	15,000	15,803
79714	RMV SKYLIGHT RPR. ROOF	871213	23,393	23,892
31650	ASBESTOS REMOVAL B<-61 A	880117	44,237	44,037 -03
21551	ACOUSTICAL CEILING INST.	880120	22,000	19,351 -02
21565	RPR. ELEVATOR B-443,NETC	880217	14,217	14,217 -02
22508	OIL PIPE LINE HARSWELL C	871115	41,385	36,754
32500	ASBESTOS REMOVAL	890129	14,580	14,580
32605	DEADBOAT LOCKS	880136	15,221	15,921
32307	CARBON DIOXIDE FIRE EXT.	880322	11,200	11,523 -02
32915	REPL. AIR CONDENSERS	880136	16,925	16,925
23004	RPR PARTS / ENGINE #5	880138	16,663	16,663
23347	MOVE SID MOUNTED GENERAT	871130	14,532	12,733 -01
23563	INSTAL. OF OIL DRIP PANS	880521	24,892	24,892
33709	SAYD/SEAL JACK FLOORS	880222	13,303	13,303
33714	INSTAL. • FLOOR TILES #482	880227	19,912	18,912
33722	SAYD & SEAL OAK FLOORRS J	880526	12,800	19,903
23526	INTERIIR FAC. MNT. REPRS.	880524	24,760	24,760
34100	INSTAL. ELECTRIC. DRYERS	880217	14,275	15,293 -01
134280	INSTAL. FIREPROOFING	880134	21,785	21,785
35557	REVOCATE AIRBLOCKS M	880125	15,000	15,000
35559	REMOVE EXISTING LETTERING	880134	11,760	11,760
135603	INSTAL. SUBMERSIBLE PUMP	880317	15,384	16,384
355664	DRAINAGE FACILITIES ARTS.	930110	12,295	12,095
135201	BLDG. ELEVATOR REPRS.	880215	13,253	10,253
235371	ASBESTOS REMOVAL	880134	11,435	11,435
336406	REPLACE CROWN TILE	880136	12,000	13,709 -02
133604	WATER SYSTEM BLDG 151 M	871229	12,000	12,403
-33217	REPL. ADHERED EPDM ROOF	980111	14,359	14,359
'33421	HIGHWAY REFLECTORS	820138	23,785	23,785
33323	REPL. OF FLOOR COVERING	880527	14,700	16,502 -01
339232	APPLY PRIME COAT	880526	15,665	16,465
400364	-F9 101	710122	21,349	20,383
	2498	1,005,823,204	83,771,332	1,083,521,508







CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BLD IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

RUN DATE: 37/05/95		DOLLAR RANGE OF AWARD (\$000) K		AWARD AMT		CURPRI	LAST MOD
PROJDOC	DESCRIPTION	HOD	AMOUNT	CURPRI-AWARD			
877322	REPAIR CURBS & SIDEWALKS C	871167	33,762	4,5558	38,122	-01	
877023	REPLACE LIGHTING S	870512	15,403		16,403		
377325	REPLACE HEATING SYSTEMS	870228	43,503		43,603		
877030	COMPRESSED GAS STORAGE T	870216	13,732		18,782		
877034	CONSTRUCT ROADWAY	870611	17,375		17,375		
877039	RAVAN FAC ADDN BLDG. 2000H	870437	152,392	3,577	154,669	-02	
877044	REMOVE CAPTAIN'S OFFICE H	870235	17,647	3,322	20,671	-01	
877049	REPLACE PUMPS G	870232	21,048		21,048		
877053	FAM HSE.-REPAIRS	871150	59,285	76	59,361	-01	
877055	REPL. JUVENT'S HEADWALLS H	870326	15,903		16,203		
877056	ALI'S FD BLDG. 2035 T	880612	235,168		235,168		
877058	REPL. CARPET BLDGS. 2540 C	870320	33,503		38,500		
377060	APRS TO COMMISSIONY 3 13943	880432	115,403	16,000	130,741	-02	
877062	REPLACE DISASTER HORN S	871109	23,403		23,403		
877063	AIR COMPRESSOR	870327	13,265		13,265		
877070	REPL. RAILROAD CROSSING S	871123	42,503		42,503		
877077	WIDELIFE WATERLING STRUCTU	871128	12,203		5,652		
877080	REPL. OF CULVERTS S	871124	66,665		65,363	-02	
877082	REPLACE UNIT HEAVIES M	830211	20,392		21,192	-01	
877090	ASPHALT PAVEMENT CRACK O	871121	59,345		59,345		
877097	INSTALLATION OF CARPET C	870310	15,232		16,232		
877098	ROOF REPAIRS S	871110	15,772		16,772		
877102	REPAIR ALK AND STEPS T	870116	10,937		10,937		
377106	REPLACE CARPET BLDGS. 3031C	871120	35,495		35,495	-01	
877107	BRIDGE TIE REPLACE 4ENT C	870212	10,184		10,184		
877111	INSTALLATION OF EARTH SATIN	880327	32,289		32,289		
877115	INSTAL. OF GOVT FURY. JSS	871113	13,003	17,500	35,602	-01	
-877119	-2ND FLR. ADDITION AT B-DGT	880135	67,693		67,693		
-877151	CONSTRUCT NEW PACKING DTS	371125	11,535		11,535		
877153	-RELOCATE CO2 TANK AND SYS	880116	23,900		23,900	-01	
877156	COMPUTER LINK SLDG. 36 F	871128	19,053		19,053		
877157	CONSTRUCTION BUILDING H	871117	15,983		15,983		
677163	AIR COMPRESSOR ENCLOSURE T	871128	12,995		12,995		
877156	INSTAL.ATION OF WINDOWS	880222	13,983		13,983		
877167	FIBER OPTICS INSTALLATION	870116	23,970		23,993	-01	
877201	RESTRIKE PARKING LOTS M	880511	256,003	7,963	263,943		
877206	PROVIDE ELECTRICAL SVC L	871101	49,317	9,359	57,686	-01	
377229	REPAIR ROOF 5/1022 M	871128	12,503		12,502		
877237	REPLACE TRANSFORMERS E	890514			187,818	-01	
877238	REPLACE ELECTRICAL FEEDERC	880324		82,315	84,705	-01	
877239	WALL & E. STORAGE BLDG. L	880618		95,536	92,677	-01	



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BOD IS PAST AND ACTUAL  
SOURCE: 245 EXTRACT FILE

58 RUN DATE: 07/05/88

DOLLAR RANGE OF AWARD (\$1000) <

PROJECT#:	DESCRIPTION	BOD	AWARD AMOUNT	CURPMT-AWARDED	CURPRI	LAST MOD-NBR
375306	APRS DEMINERALIZER SYSTEM F	690404	54,493	3,200	57,693	-21
975315	PAINT INT OF BLDG 25 S	830219	15,920	2,340	18,160	-32
875325	REPAIRS TO PARKING DOTS R	390205	163,404	34,523	198,727	-33
875341	CONSTRUCT CONCRETE PAD	880524	24,335	—	24,335	
375350	EXTERIOR PAINTING — A	880509	89,150	—	89,150	
875394	REPLACE UPPER ROOF SLIDING DOOR	870833	33,100	—	33,100	
375607	RENOVATE BASE FIRE ALARM H	871221	71,175	—	71,175	
875631	REPLACE LOWER DOOR G	871028	31,500	—	31,500	
875636	CONTR. OF RECREATION PAVILU	870922	84,000	—	84,000	
875637	INTERIOR PAINTING	871215	22,630	—	22,630	
875638	INSTAL. FOAM DROP CEILING E	871012	19,480	—	19,480	
375639	INST UNITARY A/C SYS L	871117	12,890	—	12,890	
375657	PURCH./INSTALL LIGHT POLE	870726	15,385	—	15,385	
875660	INSPECT/REPR 500 TON CHIL	870728	23,012	—	23,012	
875670	PURCHASE/INSTALL 24 WINDO	870817	13,464	—	13,464	
875681	PURCHASE/INSTALL 3 DOLES F	870731	17,000	—	17,000	
375682	RMV/DISP FRIBLABLE ASBESTOS	870710	12,543	—	12,543	
875686	PURCHASE/INSTALL FCAM CEILE	871122	24,750	531-	24,769	
375690	RENOV TO H/B/SQUASH COURTS A	871224	21,200	—	21,200	
875696	INSTAL. FOAM CEILINGS	871116	21,600	—	21,600	
875900	RPL CO-LUMN PEDESTALS M	871113	23,750	—	23,750	
875909	BITUMINOUS PAVING 2R	870425	25,065	—	25,065	
875914	APR 2500 KVA TRANSFORMER SP	871019	24,270	—	24,270	
875919	PPR OF WATER STORAGE TANKS	871030	51,114	4,139	55,303	-31
875922	RESURFACE DRIVEWAY	870525	21,000	—	21,000	
875929	LIGHTINGS IMPROVEMENTS M	870129	55,700	—	55,700	
375939	RPL MAIN DIST PANNE BOARD R	870426	16,977	—	16,977	
375940	SITE PILE FOR FAIR STRUCT R	871231	113,367	5,718	116,785	-22
375947	INSTAL. OVERHEAD DCCR I	871221	13,955	—	13,955	-31
375968	CLEAN 3 STORY DRAINAGE	830418	24,702	—	24,702	
375973	REL 6' FIREMAIN	870430	13,089	—	13,089	
875926	FUEL MANAGEMENT SYSTEM	890324	12,500	3,522	16,022	-32
376331	BASKET 3 VOLLEYBALL COURT	870525	21,750	—	21,750	
375617	1W EXHAUST DUCT MOD S	870406	24,834	—	24,884	
375630	CLEAN 3 HEAT EXCHANGERS J	870522	12,400	—	12,400	
875676	INSULATE 6W INLET DUCT	871129	15,340	—	15,340	
375493	COMPUTER TAPE ROOM ELD-22	870928	21,394	—	21,394	
875620	RPL ASSESTS FROM PAILER F	870925	17,100	—	17,100	
377001	ELECT. SER. FOR COMPUTER B	871211	43,600	3,974	47,574	-31
877003	RENOV. SCALE REPAIR LA3 T	830424	47,989	—	47,989	
877017	AIR COMPRESSOR FAC. B.35 N	980510	33,000	2,437	37,437	-33

PROJ00F.STAFF1.CNTL



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BJD IS PAST AND ACTUA-  
SOURCE: CMS EXTRACT FILE

S7	RUN DATE:	07/05/83	DOLLAR RANGE OF AWARD (\$000) K	LAST MOD 482
PROJDOC	DESCRIPTION	90)	AWARD AMT AMOUNT	CURPRI-AWARD
373714	SEAL COAT/PARK. LOT STRIP	871103	16,000	16,000
373716	REPLACE 2 HEAT PUMPS A/C U	871105	13,500	13,500
573732	A/C CHILLER UNIT REPAIRS	870725	24,750	24,750
373734	REPLACE WALKOWS QUARTERS O	880510	23,200	23,000
573745	MISCELL. RECOVERALS O	880119	13,100	13,100
373746	RESTROOM REHAB. SUZHIPS V	871103	17,500	17,500
373755	REPRS. TO BLDG. 204 W	871103	23,300	23,300
373756	ELECTR. TRANSFORM. REMOVE	880213	16,500	16,500
373757	MISC. REPRS. TO 21 APT. D	871102	15,750	15,750
573759	CARPET INSTALLATION	871104	24,000	24,000
373760	FAVE OF MAINSIDE PARK LDTC	871104	62,000	62,000
373765	REPLACE BOILER/HOT WATER N	880415	189,941	189,941
373794	EM CLUS ALTERATIONS S	280328	85,520	85,520
373794	INSTAL. WINDOWS	971231	22,800	22,800
373796	CONCRETE PLATFORM PRPS B	880507	216,290	216,290
373797	REPLACE SUBMERSIBLE WELL	870530	13,933	13,933
374108	INSTAL. LIGHT FIXTURES	870227	12,327	12,327
374248	PEINST. PUSSATION CHAMBER D	870325	14,933	14,933
374652	RENO. TO LEGAL SERVICE P	880101	122,000	122,000
574654	FIRE SUPPLY. 3 ALARM SYSTEM	830226	33,805	33,805
374660	AWARD 200F WOODS S	890115	513,000	584,032
374674	TOACC FIBER OPTIC CABLE M	820319	193,122	193,122
374677	RPR2 ELEC SYST M	871228	86,000	86,000
674515	SECURITY LIGHTING H	871207	13,593	13,593
374530	RPR/ALT TO LOADING DOCK< 1U	380101	36,000	36,000
874530	BLDG. #1000 EMERG. -164T	280436	13,098	13,098
374670	RELOCATE GJARD SHACK R	871127	11,743	11,743
874706	REPLACE BUIL. BLDGS. 15A G	880122	73,493	73,493
374715	OFFICE RENOVATIONS 3L 2 M	870221	81,117	81,117
374715	APQS 5/J/70 OFFICE 3-DG 3 S	870312	173,747	173,747
374722	GROUND MAINTANCE A	870312	69,587	69,587
874729	SHED ROOF J-DG. #2	890114	24,200	24,200
374733	SITE PEP'S FOR SEC'DODULE S	280114	43,661	53,512
374741	CONSTRUCT SURSTATIOV V <	871120	65,226	65,226
374766	PEPRS. PLATING SHOPS FL.	671102	15,093	15,093
374761	GARAGE ROOF REPAIRS L	880329	29,900	29,900
374766	APRS TO CEILING M	890303	14,913	22,112
374791	HPL CARPETIN'S C	871218	11,443	11,443
375514	REPAIRS TO PATROL VAGAD P	871226	23,900	23,900
375503	REJILING OF HEATVIS S	870516	12,345	17,545
375503	ALTS TO INTERSECTION S	870324	19,323	20,245

PNDMOF. STAFF1.CNTL



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 3JD IS PAST AND ACTUAL  
SOURCE: CMS EXTRACT FILE

3JD	55	RUN DATE:	07/03/86	DOLLAR RANGE OF AWARD (\$000) *	DESCRIPTION	MOD BY	AWARD AMOUNT	CURPRI-AWARD	CURPRI	LAI MOD
371532					REPLANT WATER TANKS 355 P		690229		67,550	-
871533					EXERCISE AREA 35L5-1-UCE R		830138	172,450	176,011	-
871644					FLD5 REPL. ELD5-1-153		671123	24,614	26,514	-
871645					ENT.DC02 REPL.LDLG.1105		671129	24,137	26,137	-
871546					REPL.CND TANK NO.1-1B-7 S		830229	53,100	53,100	-
871655					REROOF SLDG.350		871124	99,184	68,184	-
371671					CONDENSATE B-40 PIER 2 S		871019	24,600	44,304	-
871672					LIGHTING 3LDG.104 A		871124	25,293	37,482	-
871680					COMPUTER KM. EXP** 3-1175C		271026	26,542	26,542	-
371691					FENCHIS GARDEN CT. MSSN D		870512	13,685	10,685	-
					ALTS.DIVING AREA,3LDG.155G		871124	43,840	49,940	-
					NEW ROOFING SLDG. 122 D		830303	53,485	53,485	-
					REFUGUE 3C1-EK 1/5-115 S		671124	39,415	19,483	-
					EXT. PAINT *3-107-107/125		871126	24,151	24,993	-
					AE2 - WALLS/CEILINGS 2.131G		390527	111,360	111,360	-
					RPR CURTAIN WALL		371125	13,700	13,700	-
					RE2 - WINDOWS 8.0.0205 H		871218	13,500	13,500	-
					APR FC-DING PARTITION 350		830112	13,379	10,879	-
					PAINT PORTAL CRANES S		971114	196,960	65,751	-
					DEATH II CONDUCT REES		870714	13,200	18,200	-
					9P2 FRESH WATER DIST SY5 C		971005	279,570	21,200	-
					REPAIR SKANE RAIL S		371021	253,235	44,295	-
					RUFE RPS AT JTR 27 R		871011	14,200	575	-
					DLA OF VAK SLG'S S		871229	93,500	69,500	-
					MABBY ( QPK DD-1 SEAT C		270307	17,960	17,960	-
					ELECT 4JD 3-D 150C2TA RY3		871224	12,845	10,845	-
					2ND AVE. PARKING S		271119	85,095	85,095	-
					HANAH 25U		380304	33,700	33,585	-
					B-354 HEATING SYS JGREGG		971110	37,725	37,725	-
					NEW TELEPHONE EXCHANGE C		830108	162,000	170,939	-
					REMOCA - ASBESTOS M&R 25 H		271204	85,400	80,400	-
					STJECU REPAIR S		870312	36,600	36,600	-
					CMM. CABLE INSTAL-ATION		830310	24,995	25,285	-
					CONCRETE PARKING REPAI2 H		871029	81,711	81,711	-
					GENERATOR ADDITION S		230112	22,200	22,200	-
					SC4253ER VESSEL REPAIR E		870730	11,800	11,800	-
					SEALING OF JOINT CRACCS		671127	14,934	14,934	-
					REPLAT SUPPLYLINE S		370315	23,425	20,426	-
					APAS TO M12CRAFT PAVEMENTS		371113	37,133	97,133	-
					REPL. SIDIYAR SLDG. 49 S		890413	97,000	97,000	-
					PAINTING OF FAY HSG UNIT N		270723	12,060	12,060	-
					372824					-



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BUD IS PAST AND ACTUA-  
L SOURCE: CIS EXTRACT FILE

RUN DATE: 07/05/85		DOLLAR RANGE OF AWARD (\$000) <		AWARD AMOUNT		MOD AMT		CURPRI	LAST MOD N <sup>o</sup>
PROCDC:	DESCRIPTION	AMOUNT	CURPRI-AWARD	AMOUNT	CURPRI	AMOUNT	CURPRI		
872651	REPAIR ELECT. FEEDER	F	571211	11,853	3,483			11,853	-01
872713	FOUNDAITONS	S	571221	45,061				50,161	-01
872726	INSTAL-CRÆT		571231	10,411				10,411	
872735	RMV EXISTING COIL	A	871310	11,700				11,700	
873002	REPLACE SHOWER STALL-S	P	871311	17,542				17,542	
873007	C0263 VOICE CON CUT-FR MEF	P	88L129	71,672				71,672	
873010	REDOOF ALDGS 201 & 302	H	82G112	55,423				60,559	-01
873200	REPAIR FUEL TANKS	S	870104	29,382				29,382	
873206	SMALL ARMS BERM WOOD GRIFFIN	S	870128	15,452				16,452	
873209	WIDEN JEEP FIRE ACCESS RD	P	871125	17,719				17,719	
873224	RE'S TO END FLOOR HEAD	EAD	93U106	10,852				10,852	-01
873633	UNDER-BUNKER CONVEYOR 200B	P	870130	12,962				12,962	
873642	LADDERS & PLATFORMS	R	580113	97,412				97,412	
873323	ALT TO RMS 1023-1033	N	880121	23,843				23,843	-01
873366	RENOV. TO STAFF LOUNGE	A	870136	14,175				14,175	
873368	ALTS. OF LAS	L	830107	29,503				32,503	-01
873375	CLEANING OF CULVERTS	S	87C116	13,122				18,122	
873403	RPR ENTR. DOORS	D	870112	15,395				16,395	
873422	RPM'S T) MECCH. SYS	G	89C121	139,724	2,337			142,631	-02
873426	MCJIFICATION TO FACILITY	G	880124	84,223	955			85,226	
873445	ROOF REPAIR	P	871114	74,000	1,325-			72,175	-01
873454	RE-JOCAFE WATER MAIN BASE S	S	870520	11,403				12,200	-01
873467	MJD RR SIGNALLING DEVICE SP	S	871123	14,655				14,655	-01
873494	REPAIR CO-OP-ING TOWER BANK	E	870132	10,331				10,331	-01
873532	OR FLRS 34-47	C	89C124	52,303				52,303	
873536	REPAIR 2F FEEDER	C	970118	16,000				16,000	
873559	REPLACE GAS TANK	Z	271128	24,953				24,953	
873565	INSTALATION FUEL OIL	G	971211	13,603	1,735			15,535	-01
873588	CONVEYOR DE-T LIFT 3105	U	870121	14,223				14,223	
873595	EMERG. KPR FEEDER	C	370512	12,233				12,233	
873596	RPR ELCTRICAL FEEDER	C	671108	21,403	1,081			22,481	-01
873597	AIR CONDITIONING REPAIRS	C	880111	37,295				37,295	
873598	OI-WATER SEPARATOR	H	830101	78,000				78,400	
873646	EMERG. OVERHAUL TURBINE	G	670115	13,000				13,500	
873652	INSTAL-DISHWASHERS	B	880131	35,558	2,576			38,144	-02
873681	ASBESTOS REMOVAL	D	871120	11D,000				11D,500	
873682	RPR CEVRAVAC CHILLER	N	870121	23,283	2,557			22,265	-01
873684	SATE PUMP FOR X-RAY SYS	C	59C119	45,611				45,933	
873698	INSULATE PIPING	P	371234	15,000				15,000	
873695	ELECTRIC SERVICE	J	571219	15,344				15,344	
873700	DOOR RÉPLACEMENT H-26-4		59C129	15,000				15,000	

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CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 3JD IS PAST AND 4JTUA -  
SOURCE: CMS EXTRACT FILE

54	RUN DATE:	27/05/63	DOLLAR RANGE OF AWARD (\$000) <	DESCRIPTION	90>	AWARD AMOUNT	CUMPLIANT	CUMPR	LAST MOD YBR
103563	USE OF LANDFILL	851231	11,760						-01
9520	RUNWAY REPAIR	851013	26,350						24/52
103558	ALTS 5 119 FOR STORE AREA G	870112	12,900						14/122
25666	ALT 3-33 FOR PREV MED-47	870220	34,245						34/245
103701	CENTRIFUGAL CHILLERS E	860220	23,944						29/116
103710	INSTAL.ATION OF CA3-E G	870715	25,937						24/375
23711	RPR SUPR HPTST & BOILERS A	870731	74,284						818,518
103712	PFOVIDE INT. RENOVATIONS	870113	13,227						14/85
103736	ALTS 5 RPS BLDG 141 G	870815	54,300						53,260
109744	REMOVAL OF INTAKE W	8801129	62,293						62/93
103763	ALT 5 APR C	871233	12,370						10/370
103770	FAM HS3-REPAIRS MRS C	871118	32,370						4,250
103772	SITE PREP PS&P PSD	870226	12,673						12,673
103773	CAMEL REPAIRS U	870419	13,210						13,210
103796	FLOOR REPAIRS D	670115	13,500						15,500
103798	DRAINAGE PARKING LOT A	870325	19,454						19,454
103799	APP HTS SYSTEM BLDG 53 C	890229	35,465						35,465
103801	REMOVE TANCS BLDG 119 T	571224	15,861						15,861
103804	CONST WALL OPENING S	870716	12,759						12,759
103807	COMPUTER KM-EXP-B 1176 C	870419	15,243						15,243
203921	INST FIRE ESCAPE BLDG. 52K	870718	17,533						17,533
103906	PORTAB-E WALK-IN REFRIGERATOR	851231	35,111						35,111
103922	15 KILOWATT PWR CAB-E	851231	31,233						31,233
103923	FIVE KI-OVOLT PWR CABLE	951231	26,273						26,273
370039	EXTEND UTILITY LINES M	870314	15,847						180/257
370082	ENTRANCE CANPIES B	870113	22,033						22,033
370101	PIER FENDERS W	871112	35,730						35,730
370292	50 PERSON JEH C	971218	1,265,000						1,306,179
470694	OVAL CRANE AE-23 K	880330	643,033						685,105
107510	ALTER 3-DGS 307,355 & 543G	371124	393,942						432,729
107503	REMOVE ASBESTOS INSULATY D	870520	223,725						269,562
107511	RE- EDUCATION CTR S	890513	186,957						185/05
107531	ALTER VARIOUS BLDGS R	880419	372,000						372,953
107532	ALTER 3-DG 12C5 K	880512	132,720						132,720
107565	VE-ICLE COMPOUD S	880423	305,707						339,456
107472	UPGRADE HLDG 224 M	580422	66,350						61,189
107500	TU23A ASBESTS REMVL CT R	871230	477,200						469,473
107514	RELOCATABLE OFFICE SPACE P	870921	2,762,734						2,762,734
1071509	PARTITIONS,DOORS,PAVELS T	870718	2,322						2,322
1071606	REPAIR SIDING 3-1245 M	871120	19,679						13,679
107028	REPAIR FIRE DAMAGE 3-091 C	870720	356,473						353,563

PNUMF-STAFF1.CNTL



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BLD IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

53 RUN DATE: 07/05/98

DOLLAR RANGE OF AWARD (\$1000) <

JDOC

DESCRIPTION	R#0	AWARD AMT ACCOUNT	CURPRI CUPPRI-AWARD	LASTI MOD NBR
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MK 13 MISSLE SYSTEM	B	870531	440,000 20,000	460,000 20,438
REPAIR PARKING LOT	G	870532	20,438	-32
REPAIRS TO BOILER	T	660321	24,880 36,033	34,240 37,015
HVAC CONTROL MODULE-F	MTF	851219	323,503	-31
WHOLE CENTER RPR PROGRAM	S	871215	19,031	342,581
INTERIOR REPAIRS	M	880229	164,077 112,473	173,503 112,473
REPAIR PARKING LOT	S	871215	112,473	-31
INTERIOR REPAIRS	F	880115	129,200	385 129,885
ROOF REPAIRS	R	870412	22,133	47,519 -32
REPAIRS STAIRWAYS	H	880120	20,800	20,900 -31
PARKING & DRIVING RAPS	L	370515	21,399	21,399 -31
REPAIRS AND ALTERATIONS	V	870327	165,703 1,500	168,203 21,650
FAIRLY HOUSING	S	861228	21,650	-32
EQUIPMENT INSTALLATION	J	870220	127,413	127,719 -32
ELEC PWR & FIRE ALARMS	T	870322	35,575	37,275 -91
RPR BLACK POWDER MAG FLRSW	N	870322	93,333	21,315 -32
ROCKET MOTOR CHAMBER	N	870727	15,750	17,977 -31
REPAIR LANDSLIDES	T	871215	39,900	42,500 -32
REPAIR LANDSLIDES	T	971229	41,250	39,150 -31
INSTAL. OF FLOOR & A/C	T	970330	23,972	24,544 -31
INSTAL. MEZZANINE		861219	23,983	23,983 -31
ADDN T2 BLDG. 2087	S	870525	171,922	171,922 159,445
STOVE ROAD REPAIR	E	871228	153,493	-31
RPR COOLING TOWER	O	561114	13,972	13,972 -31
PP - SPRINKLING SYSTEM		870329	19,713	19,713 -31
REM OF EAST WATER SLUDGE		871123	45,500	45,500 -31
MODIFY SONJUOY FACILITY	S	680421	62,704	62,704 -31
MODIFY SONJUOY	L	880520	164,932	164,932 51,732
MODIFY BAYS FOR COMPUTER	M	880325	50,892	50,892 99,450
TESTINS OF RAILROAD	A	870727	99,450	99,450 312,400
CCTV SURVEILLANCE SYSTEM	B	890224	312,400	-31
REPLACE WINDOWS BLDG. 13		870227	24,800	24,800 -31
RENOVATE CONTRACTS AREA	T	871123	411,813	411,813 67,300
ELEC. >ONE> TO MAGAZINES	B	850311	85,653	85,653 158,229
TISSUE BRIDGE REPAIRS	B	870722	155,400	155,400 50,351
A/C FOR COMPUTER ROOMS	T	270715	49,935	49,935 316,233
CONCRETE BRIDGE REPAIRS	W	871117	221,100	221,100 35,295
DEMOLITION OF GARAGE	S	970227	23,455	23,455 -31
PROVIDE NEW TRANSFORMER	E	861215	11,702	11,702 15,385
RPRS T2 ROOF BLDG.115	G	870329	43,973	43,973 51,523

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CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BID IS PAST AND ACTUAL  
SOURCE: CMS EXTRACT FILE

PRJCD0:	RUN DATE:	DOL-AR RANGE OF AWARD (\$000) K	AWARD AMOUNT	MOD AMT CUSPRT-AWARD	CURPRI	LAST MOD \
367385	52	57/05/65	800	257,922	257,771	285,591
367386	JF: 83JN30		0	57,551	2,400	57,300
367387			T	570,525	47,450	67,500
367390			T	570,724	29,900	57,150
367391			H	670,529	183,900	2,500
367392			H	670,529	2,500	186,300
367393			H	670,529	2,500	347,542
367394			O	870,926	347,542	157,152
367395			O	826,529	152,552	172,282
367396			L	870,111	169,275	193,138
367397			L	570,113	195,000	4,940-
367398			S	570,113	195,000	116,343
367399			S	861,027	121,283	15,500
367400			O	861,027	121,283	11,900
367401			O	561,020	13,600	32,352
367402			T	661,017	11,900	56,795
367403			T	370,330	33,995	44,660
367404			O	871,010	51,595	179,485
367405			O	871,010	45,754	38,000
367406			G	670,524	173,000	76,900
367407			I	651,211	39,700	167,879
367408			I	871,013	39,700	-1
367409			M	990,222	169,000	12,061
367410			R	861,221	12,061	198,349
367411			H	560,644	187,490	12,513
367412			H	251,030	12,513	14,900
367413			Y	861,013	12,513	122,200
367414			Y	560,643	12,513	149,769
367415			Y	870,715	12,513	40,450
367416			N	671,221	147,005	975,371
367417			N	370,320	31,920	137,385
367418			R	230,415	895,000	13,793
367419			D	661,031	137,385	157,532
367420			D	870,217	137,793	47,024
367421			D	570,408	139,700	1,434-
367422			D	371,019	172,503	34,663
367423			S	370,230	34,663	11,446
367424			F	850,716	11,446	34,373
367425			F	861,023	13,500	12,215
367426			S	870,731	13,500	1,351
367427			S	570,126	12,865	1,339
367428			A	370,415	12,415	1,339
367429			A	871,237	12,415	18,800
367430			A	871,237	12,415	18,800
367431			A	871,237	12,415	18,800
367432			A	871,237	12,415	18,800
367433			A	871,237	12,415	18,800
367434			A	871,237	12,415	18,800
367435			A	871,237	12,415	18,800
367436			A	871,237	12,415	18,800
367437			A	871,237	12,415	18,800
367438			A	871,237	12,415	18,800
367439			A	871,237	12,415	18,800
367440			A	871,237	12,415	18,800
367441			A	871,237	12,415	18,800
367442			A	871,237	12,415	18,800
367443			A	871,237	12,415	18,800
367444			A	871,237	12,415	18,800
367445			A	871,237	12,415	18,800
367446			A	871,237	12,415	18,800
367447			A	871,237	12,415	18,800
367448			A	871,237	12,415	18,800
367449			A	871,237	12,415	18,800
367450			A	871,237	12,415	18,800
367451			A	871,237	12,415	18,800
367452			A	871,237	12,415	18,800
367453			A	871,237	12,415	18,800
367454			A	871,237	12,415	18,800
367455			A	871,237	12,415	18,800
367456			A	871,237	12,415	18,800
367457			A	871,237	12,415	18,800
367458			A	871,237	12,415	18,800
367459			A	871,237	12,415	18,800
367460			A	871,237	12,415	18,800
367461			A	871,237	12,415	18,800
367462			A	871,237	12,415	18,800
367463			A	871,237	12,415	18,800
367464			A	871,237	12,415	18,800
367465			A	871,237	12,415	18,800
367466			A	871,237	12,415	18,800
367467			A	871,237	12,415	18,800
367468			A	871,237	12,415	18,800
367469			A	871,237	12,415	18,800
367470			A	871,237	12,415	18,800
367471			A	871,237	12,415	18,800
367472			A	871,237	12,415	18,800
367473			A	871,237	12,415	18,800
367474			A	871,237	12,415	18,800
367475			A	871,237	12,415	18,800
367476			A	871,237	12,415	18,800
367477			A	871,237	12,415	18,800
367478			A	871,237	12,415	18,800
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367480			A	871,237	12,415	18,800
367481			A	871,237	12,415	18,800
367482			A	871,237	12,415	18,800
367483			A	871,237	12,415	18,800
367484			A	871,237	12,415	18,800
367485			A	871,237	12,415	18,800
367486			A	871,237	12,415	18,800
367487			A	871,237	12,415	18,800
367488			A	871,237	12,415	18,800
367489			A	871,237	12,415	18,800
367490			A	871,237	12,415	18,800
367491			A	871,237	12,415	18,800
367492			A	871,237	12,415	18,800
367493			A	871,237	12,415	18,800
367494			A	871,237	12,415	18,800
367495			A	871,237	12,415	18,800
367496			A	871,237	12,415	18,800
367497			A	871,237	12,415	18,800
367498			A	871,237	12,415	18,800
367499			A	871,237	12,415	18,800
367500			A	871,237	12,415	18,800
367501			A	871,237	12,415	18,800
367502			A	871,237	12,415	18,800
367503			A	871,237	12,415	18,800
367504			A	871,237	12,415	18,800
367505			A	871,237	12,415	18,800
367506			A	871,237	12,415	18,800
367507			A	871,237	12,415	18,800
367508			A	871,237	12,415	18,800
367509			A	871,237	12,415	18,800
367510			A	871,237	12,415	18,800
367511			A	871,237	12,415	18,800
367512			A	871,237	12,415	18,800
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367559			A	871,237	12,415	18,800
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367561			A	871,237	12,415	18,800
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367563			A	871,237	12,415	18,800
367564			A	871,237	12,415	18,800
367565			A	871,237	12,415	18,800
367566			A	871,237	12,415	18,800
367567			A	871,237	12,415	18,800
367568			A	871,237	12,415	18,800
367569			A	871,237	12,415	18,800
367570			A	871,237	12,4	



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE JJD IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

51	RUN DATE:	07/05/95	DOL-AIR VALUE OF AWARD (6000) K	AWARD AMT	CURPRI	MOD AMT	CURPRI-ADDED	LAST MOD NBR
PROJCD:	DESCRIPTION	80)						
865961	PAINT RAILROAD BRIDGE	A	870707	21,600	318	22,418	-32	
865964	RPL STREET LIGHTS	L	871223	33,587	33,587	-31		
865972	INSTL OF TELEPHONE CABLES/E	L	870234	33,993	33,993	-31		
865976	EXPAND RESTROOM ALDS 216 T	T	830115	66,397	66,397	-32		
865980	PROJ-S RPP. WINDOAS	P	650721	12,603	12,603	-31		
865985	REMOVAL OF ASBESTOS O	O	670331	17,257	17,257	-31		
865991	REL AIR CONDITIONING SYS	SYS	860718	24,063	24,283	-31		
866464	CONSTR HAZARDOUS WASTE P	P	650714	15,622	15,622	-31		
866487	INSTAL. KITCHEN EXHAUST	E	660327	12,795	12,795	-31		
866495	INSULATE REFRIGERATION	E	861124	23,003	23,003	-31		
865924	CONSTRUCT PARKING AREA P	P	871220	56,202	3,235	59,235	-31	
867001	RPL SLD-E ROOF VAR SLDU R	R	861227	327,261	3,425	330,687	-32	
867003	ARCND 3-MY	E	861223	30,613	1,075	31,693	-32	
867004	RENOVATION ALDSG.	N	860220	29,500		29,500	-31	
867005	MODIFICATION'S	M	860517	14,314	997	15,311	-31	
867007	ALTS T-J BLDGS. 2323	T	870212	186,553	3,757	196,317	-31	
867009	RENOVATION BLDG. 233	L	870211	143,963	1,452-	147,501	-31	
867011	RPL BLDG. VAR BLDGS	H	551222	135,563		135,663	-31	
867012	RPL FA SYSTEM	A	870223	122,123	12,333	134,423	-31	
867013	REPLACE WATER	G	870328	95,665	5,000-	91,665	-31	
867015	INSTAL. OF FOOD SVC LINE	Z	861124	23,123		28,123		
867016	REPL. AIR CONDITIONING	N	871119	65,792		65,792		
867019	ALTS T-J SLDG. 232	L	370311	198,315		198,315		
867020	CONSTRUCT ADDITION	N	871222	93,622		93,622	-31	
867021	RENOVATE LAS BLDG.	2044	870716	22,383		22,383	-31	
867024	REPL. LINÉELS CONC. BLDGS. L	L	870327	186,705	13,216	198,122	-32	
867030	REPLACE LINÉEL STATION	H	870328	143,593	7,433	148,770	-32	
867033	REVISIONS TO BLDG 227	H	870330	643,352	7,335	657,935	-32	
867036	COV OF PARKING LST	A	860212	44,323	1,977	46,302	-32	
867039	ALTS T-J BLDG.	L	670512	190,203	15,412	206,312	-32	
867040	MAJUS 3RDAGE REPAIRS	D	671225	370,003	13,197	383,197	-32	
867040	REP-L COOLING TOWER SUPP	G	870710	46,446	46,446	-31		
867044	R&A CONSOLIDATED MESS	N	870515	123,222	10,593	135,593	-32	
867050	REPAIRS TO SYNTHASIA	L	870713	185,111	5,364	192,055	-31	
867054	CONCRETE DOCK REPL.	C	861125	35,780		36,780		
867062	DEAO VARIUS BLDGS.	S	860930	34,413		34,413		
907063	INSTAL A/C IN CONC-UTER R18	R	860327	19,034	2,000	21,034	-32	
867064	CHEMICAL STOPPAGE	R	870708	65,903	1,375	63,276	-32	
867067	PYRU CURING MWT	S	870712	145,175	1,152	147,358	-31	
867069	INSTAL. LINES FOR FWT	S	870110	15,495		15,495		
867072	EXTERIOR PAINTING	A	860224	190,225		190,225		



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BOD IS PAST AND ACTUAL  
SOURCE: C4S EXTRACT FILE

50	RUN DATE:	37/05/86	DOUBLER VALUE OF AWARD (\$000) *	AWARD AMT	MOD AMT	CURPRI-AWARD	LAST MOD N5~
PRJDOC:	DESCRIPTION	BOD	AMOUNT	CURPRI			
86155	EXT PAINTING VAR 3-DJS	870136	21,625	15,690	-01	21,495	
86156	EXT PAINTING VAR 4-DJS	870327	52,733	52,733	-02	68,477	-02
86157	RPL SOILER STACKS	870327	13,325	13,325	-02	25,190	-02
86161	CONST : CONFERENCE Rm 552	890319	35,403	35,403	-01	43,279	-01
86163	FOUND 10K'S VERT MILLS	890615	113,362	113,362	-01	117,383	-01
86164	ROOF T-J SAFETY RAIS-S	871226	22,792	22,792		22,792	
86165	ALT TO MINI MART 6-324	861230	20,591	20,591	-02	256,900	-02
86166	RPRS T-J AIRCRAFT PARKING R	870318	256,900	256,900	-01	110,650	-01
86168	INST TELEPHONE CAB-E P	870318	110,650	110,650		24,752	
86170	PLATIN SHD> DEMO 3 124 H	870315	24,752	24,752	-01	24,752	-01
90173	REPL. COOLING TOWER G	880212	22,515	1,551	-01	59,259	
90177	WATER CHILLER 3-DU 320	870219	53,259	53,259		10,757	
90521	REM CARPET S INSTL SCV*T	860410	10,757	10,757	-01	26,562	-01
30344	INSTL LAM' COVER ALDJS 42 R	860337	13,281	13,281	-02	187,451	-02
963563	Y451A FLAMMABLE STORAGE U	861224	185,000	1,451	-01	18,235	-01
505594	ROOM ATERIATIONS F-F-A S	860501	17,635	500	-01	10,715	
905616	REPAIR ROADWAYS C	860423	10,715	30,777	-01	30,777	
905664	RPT OF ROADWAY DRAINAGE	851221	30,777	23,265	-02	22,222	-02
50570	BACK-U3 ELEC PWR SJ:	870221	343-	44,200	-01	44,200	-01
80574	CARPET TILE B-6 A	851210	44,200	41,273	-02	42,863	-02
80593	RENOV TO RESTROOM 3-D 2/3	861223	41,273	1,570	-02	22,222	
665717	INSTL OF FOLDING STATES	870328	22,222	20,880	-02	20,880	
805723	NORTH SIDE TRANSFORMER	870132	20,880	133,635	-02	133,535	-02
805727	WAREHOUSE CONVENTION 3-4CE	870221	133,635	32,532	-02	32,532	-02
805720	P - 450-TON COOLING TOWER	861115	28,670	1,775	-01	16,490	-01
865784	SÉCURÉ RAILINGS	861225	14,714	103,000	-01	110,450	-02
805801	INSTL 1,000' DELINIV 0-36E	870311	103,000	1,450	-01	54,755	-01
805904	REPLACE DOOR OLD 112 M	870325	11,473	3,532	-01	391,785	
963505	RENOV. OFFICE SPACE 3#137 M	261112	357,502	3,479	-02	362,977	-02
863907	FIRE DEFICIENCIES 3-17 L	880401	167,200	167,200	-03	167,000	-03
805309	CONSTRUCT AREA 3LDJS 303 M	870313	194,157	194,157	-01	194,157	-01
205710	REPLACE MAIN ENT DDP	870528	23,387	23,387		23,387	
805721	CON LOADING DOCKS 3-DGS. 7L	870311	44,897	23,387	-01	54,755	-01
805922	NE* FUMIGATION FAC 3-4JS L	870403	363,477	23,387	-01	391,785	
865940	BITUMINOUS PAVING 328S W	870230	25,102	62,452	-02	87,552	-02
805741	TRANSFORMER REPLACEMENT P	870523	113,383	571	-02	120,363	-02
805945	REDOOF OFFICERS MLLS	870139	76,527	76,527		76,527	
805940	REPAIR TO ROOFS S	870903	25,102	25,102	-01	36,988	-01
805949	REPAIR 30' ROWLING ALLER S	871223	19,585	19,585	-02	19,585	-02
805754	REPAIR STORM WATER INLET S	870217	25,102	43,345	-02	76,445	-02
505756	RPR STRUCTURAL MEMBERS	870227	16,500	16,500	-01	20,081	



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 3ID IS PAST AND ACTUA-  
SOURCE: CMS EXTRACT FILE

49 RUN DATE: 37/05/88

DF: 88IJN30

PROJCD0C

DOLLAR RANGE OF AWARD (\$300) X

	DESCRIPTION	AMOUNT	Award Amount	CURPRI-AWARD	CURPRI	MOD AMT	LAST MOD Y
964572	FIRE SJPP. ALARM INSTALW	680426	437200	437200	437200	-	-01
864573	FIRE SJPP. & ALARM SYSTEM	850331	33824	52558-	28756	-02	
864577	RPL 1500 KVA TRANSFORMER E	371237	33979	33978	39778	-01	
864578	FIRE SJPRESSIDY S	830127	43479	46749	46749	-01	
864582	INSTL TOWER PIPING M	371113	19797	19797	19797	-01	
864583	FOUNDATION INSTALLATION S	690226	42792	45292	45292	-01	
864608	POWER CABLE REPAIRS V	371218	13320	10320	10320	-01	
864830	WIRE MESH FENCE C	870113	21592	21592	21592	-01	
864639	PERIMETER INSULATION M	261120	16300	500	14700	-02	
864643	RF - DILLEN STACKS 3-4 O	871217	163010	189810	189810	-01	
864645	RPL INDUSTRIAL EQUIPMENT P	550323	10200	101700	101700	-01	
864655	PROF. J. SITE PREPARATION E	860723	19200	19200	19200	-01	
864657	RENOVATION TO OFFICES M	870527	24425	25380	25380	-01	
864658	CODE 35A COMPUTER AREA N	870318	263203	55759	3397167	-13	
864665	MISU OFFICE SPACE 2-DS 22P	870229	172511	1737	1737	-03	
964666	PAVING/DRIVING GATE 32A S	691221	697559	697559	697559	-02	
864582	RPL PAVING S INSULATION K	870523	23360	23360	23360	-01	
864583	RP - COOING TOWER SPRINKL	571220	657351	657351	657351	-01	
864693	INSTALLATION OF PEAK SLAVE	830129	45133	51397	51397	-05	
864696	DO176 INSTALL ST REPAIRS G	870515	527400	527400	527400	-03	
864900	IMPROVEMENT & LANDSCAPING	861216	73700	79700	79700	-01	
864936	SERVICE ACCESS DOORS N	871221	91293	91293	91293	-01	
825060	LADDER S STAIRS BLDG 15 G	871231	123494	123494	123494	-03	
865101	SANITARY SEWER RP-3 A-T M	870715	22493	22493	22493	-02	
865105	INSTL NEW ELECTRIC CAD-E	870522	157422	157422	157422	-01	
865108	INST PJAEV 35 GEN 551 N	830322	12393	12393	12393	-01	
865110	EMERGENCY GENERATOR S 3524	870529	55930	5474	14640-	-03	
865111	RP - COMMUNICATOR	871216	111775	111775	111775	-02	
865116	CLEANING OF REST ENGINE	831217	23750	23750	23750	-01	
865118	PAINT S APR STATION GT35 F	870522	69700	57393	747393	-07	
595130	MUD HVAC BLDG 149 S 226 N	271113	75967	76767	76767	-01	
565131	STRUCT S HASDN APR 3-275	970206	53500	53500	53500	-01	
365133	PRECISION APPROACH 24TH P	371208	62554	37352	76795	-03	
865136	RPL ROOF BLDG 175 S	870317	435644	436724	436724	-01	
865140	ALT S 32R STORM SLAERS	870422	101723	37355	105761	-01	
365145	HVAC COMMISSARY T	871112	424493	111514	607112	-03	
865149	FCJND KING SCORING MILL	861223	13590	13590	13590	-01	
865151	SU-FUHIC ACID CONT 35C2	871111	17840	37354	21274	-01	
865152	ENTRANCE BLDGS 123 H	870520	124793	97343	132793	-01	
865153	POWER TO VATS	870427	146465	146465	146465	-01	



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BOD IS PAST AND ACTUAL  
SOURCE: CMS EXTRACT FILE

PROJDOC	DESCRIPTION	+00	DOL-AR RANGE OF AWARD (\$000) <		CURPRI	LAS	MOD
			AMOUNT	AWARD			
863747	REFINISH DRILL HALL - DECK D		14,800	590	15,690	-1)	
863749	PAINTING OF ADMINISTRATIVE'S	870915	63,000	63,000	63,000	-1)	
863763	RPS OF TRANSFORMER'S	871110	39,800	5,250-	33,550	-1)	
863770	REPAIR OF ROOFS	861201	63,500	2,422	65,922	-1)	
863772	INSTL OF SPRINKLER SYSTEM	873613	125,000	39,121-	86,977	-1)	
863773	REMOVAL OF ASBESTUS	P 370922	25,700		25,700	-1)	
863775	RP- OF ELECTRIC SERVICE	S 51010	13,262		13,262	-1)	
863797	REPLACE SURVEY WIV/DOJOA	830320	69,250		82,102	-1)	
863798	TELEPHONE INSTALLATION	A 651130	11,113		11,163	-1)	
863802	RPS/ATS BLDG C-6	P 371125	183,000	14,713	203,713	-1)	
863805	MAGAZINE ACCESS INSTRUMT	I 670724	193,250		194,972	-1)	
863836	RAILROAD RECONSTRUCTION	A 870312	1,069,545	39,298	1,107,933	-1)	
863839	REPLACE HOT-ÉR BLDG. R-3	G 871022	149,315	37,732	153,397	-1)	
863842	REARS. TO BLDG. C-3	T 830105	82,400	7,051	83,461	-1)	
863844	DEMO B-DGS C-47, S-5	P 870101	24,999		24,009	-1)	
863846	CONST OF GUARD HOUSE	H 870331	13,477	1,990-	21,032	-1)	
863849	ALTS MAIN GATE CARLIS NJ	H 871216	190,000		194,562	-1)	
863850	RPL OF ASRC AREA CRANE	S 650349	32,032		30,083	-1)	
863865	PERIMETER FENCING	T 330422	279,713		279,718	-1)	
863875	INSTL OF METERING UNITS	A 870227	13,433		13,837-	-1)	
863876	RPL OF MAGAZINE DOORS, V	G 671231	345,000		346,000	-1)	
863895	BALLFIELD LIGHTING	L 570115	333,362		333,862	-1)	
864451	NEW COMP. RQDN 3 - 4712	H 351026	229,500	3,500-	225,000	-1)	
864464	REPAIRS & A-TERRATIS	G 680418	228,000	4,746	232,746	-1)	
864465	CONST PAINT SHOP STORAGE	E 570722	71,611	6,171	75,782	-1)	
864467	TEST GAS LINE	S 871217	34,957	5,295	41,242	-1)	
864471	COOLING TOWER	J 871022	43,777	15,435	64,205	-1)	
864472	ROOF HALL STORAGE AREAS	M 661029	55,700		55,700	-1)	
864479	AIR CURTAIN INSTALLATION	A 350322	23,000		23,450	-1)	
864483	FAM HS3- RPRS. OTIS. P	T 870514	51,133		450	-1)	
864485	INSTL OF FIRE 3 ALARM SYST	S 871215	95,988	1,189	98,513	-1)	
864486	FIRE SUPPK. & ALARM SYSTS	930301	93,000	1,570	98,578	-1)	
864494	FIRE & ALARM SYSTEM IMP'S	N 270520	59,400		59,400	-1)	
864496	HEATED AIR CURTAIN INSTL	P 871129	41,803		41,803	-1)	
864497	MATERIAL STORAGE FACILITY	P 870121	57,311		65,033	-1)	
864500	DEMO 7 BLDGS O	P 370521	303,611		365,301	-1)	
864507	FIRE ESCAPE STAIRS	K 971023	35,924		35,924	-1)	
864514	FIRE SUPPRESSION	A 871030	23,903		21,707	-1)	
864535	REPLACE WINDOWS BLDG.	C 736C	670321		10,123	-1)	
864562	FIRE SUPPRESSION	K 871128	12,903		12,903	-1)	
864569	FIRE SUPPRESS & ALARM SYSC	S 630318	53,583		53,583	-1)	



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 3DD IS PAST AND ACTUAL  
SOURCE: CMS EXTRACT FILE

RUN DATE:	07/05/83	DOLAR RANGE OF AWARD (\$000) K	LAST MOD Y
PROJDOC:	DESCRIPTION	AMOUNT	CURPRI CU,PRI-AWARD
		AMOUNT	MOD AMT
863307	REPAIRS TO ROOF	162,937	162,937
863314	MOD PSICO ACOUSTIC RES. L	55,635	65,345
863315	INT & EXT PNTG	26,155	26,155
863318	REPL. LIGHTING GÉNÉRATOR A	39,295	44,335
863321	RPR/VALK HUMIDITY CONTROL	123,795	141,961
863325	REPAIRS TO VALLEY	66,122	56,610
863347	PRT MAINT AC INCH CON 420	69,324	17,800
863350	AIR CONDITIONING REPAIRS C	870,718	69,623
863352	RPR HEAT EXCHANGE S	890,725	253,443
863356	HTR & A/C RPRS BLDG. 453 C	830,156	49,783
863373	RPR POWER CABLES VAULT 5&E	860,728	13,000
863374	REPL. OF HEATING UNITS C	870,724	83,493
863391	REPAIR FLOOR TILES	861,115	15,720
863396	RPR FEEDER D	870,715	55,715
863399	RPR REFRACTORY A	850,319	12,638
863406	RPR EXIT & EMERS. LT'S	861,122	13,542
863408	SECURITY GATES & JOINTS C	630,219	279,500
863409	SECURITY DOOR IMPROVEMENT	870,518	244,770
863424	REPAIR 3LDR	361,212	24,939
863443	ALTS RRS BLDG 37 C	870,217	113,453
863445	ALTS R4 114-5=1150	870,311	22,783
863447	STAGING AREA BLDG 37 S	870,316	187,814
863449	HYBRID LAB	871,127	374,545
863450	INSTL 3DILER BLDG 37 P	870,229	85,835
863452	UPGRADE ELEC DODGE 206.2 A	970,212	53,500
863459	RPR UTILITIES PIER 7 J	871,116	209,263
863469	RPLNT EXISTING SEC FENCE	271,116	69,870
863470	EXT LT3 IMPROVEMENT D	870,711	156,290
863471	RPR FLR & WINDO-S 3-135 C	830,128	135,693
863474	RPR POOF E141 P	870,210	47,700
863476	RPR 3 ALT 3-1 D	861,223	26,750
863478	RPR POOFES Y	871,116	14,300
863484	RPRS T 3 FLR TLS 3 STR TRDT	870,211	1,420
863492	PRJV. DEEP DRAFT CAMEL'S M	870,310	2,200
863497	RPR KODIS 3-106 P	860,217	121,780
863499	LTS FOR VET FACIL-ITY	860,710	12,433
863706	REM WALL PARTITIONS	870,519	23,000
863707	INTERIOR PAINTING P	870,716	55,939
863709	ALTS T 3 TYLNAS HAL-	560,115	17,500
863711	REPLACEMENT OF CONDENSER	650,213	21,993
863733	SECURITY IMPROVEMENTS	861,121	15,400
863744			

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CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 32D IS PAST AND ACTUA-  
L SOURCE: C4S EXTRACT FILE

RUN DATE:		37/03/83		DOL-AAR RANGE OF AWARD (\$1000) *		AARD		MOD AMT		CUPRI		LAST MOD N.	
PROJECT#		DESCRIPTION		30)		AMOUNT		CUPRI-AWARD					
902502		DEMO ALL ALICU PROPERTIES	860532			51/663		2/420		54/083		-02	
862008		BEST SYSTEM INSTL N	850534			37/423		748		38/168		-02	
802511		REPIPE HTG SYS #LDG. 304	870115			61/293		23,359		85/162		-05	
802514		PNT INT EXT VAR #LDGS	V			72,001				72/200			
802515		PNT INT VAR #LDGS	850530			11/097				11/097			
802526		LIGHTING PROTECTION	830224			124/218				118/383		-02	
802531		RANGELAY GEN INSTL --	870320			13/403				19/403		-02	
802532		RE-LAMP #LDG. 294	861213			47/343				47/347		-02	
802536		STEAM >IT REPAIRS	830214			123/742				123/100		-01	
902539		CUNYTH DEER FENCE	K			43/193				58/592		-04	
802542		ROAD CRACK SEALING	K			135/865				132/359		-02	
802549		35 KV JPOHAGE	E			207/021				23/820		-04	
802565		EMERGENCY GENERATOR	S			23/303				23/303		-02	
802567		LIGHTNING IMPROVEMENTS	F			31/725				33/101		-02	
802574		REP. DUTJNIVS PAVEMENTS	C			17/103				33/965		-05	
802578		PERIMETER SECURITY FENCE	M			39/303				41/3/115		-05	
802580		EMC LIGHT HLD 1/2,3 ? S R	870736			15/503				15/503			
802590		RPA TRANSIENT LV A&B 3-3	C			177/375				189/333		-07	
802596		RPA EXT HLD 3	P			55/303				55/985		-04	
802599		PAVING & SITE IMPROVEMENT	C			184/265				180/959		-05	
802606		GROUNDDING SYSTEM	M			580224				72/304			
902533		REPAIR EPDM QDF "DG 32 C	861212			33/953				38/953			
802535		ROOF RRS, SHINGLES	A			67/303				67/303			
802536		FENCING	E			870120				44/893		238	
802636		RPR PAVEMENT BLDG. 102	M			560727				16/353			
802640		RVA & TAXIWAY STRLING	M			861229				38/122		37/522	
802641		ROOF RRS, MAGAZINE AREA	M			870538				15/165		15/185	
802643		ROOF RRS, VARIOUS BLDGS.S	S			870715				62/911		2/713	
862044		RPRS TO A/C CONCRETE PAVES	S			861223				77/934		77/934	
862646		AIR MAINTENANCE VANS P	P			871136				128/993		24/587	
862647		PAINTINGS OF FAM HSU UNITS	P			860328				18/203		18/203	
802660		REPL. SHOWER STALLS	S			880330				17/823		17/823	
902709		INSTL TELECOMM. CAB-E	G			860530				5/553		25/383	
802719		CONSTRUCT INCINERATORS	A			870428				62/803		70/265	
805002		PROV&SECURE ROOF 3,503	A			45/125				15/253		15/253	
805011		INSTL ROOF	S			361221				45/767		45/467	
805204		ROAD REPAIR	J			860111				15/093		15/753	
805216		DISC CONTACT JACK U	F			d91123				12/642		19/642	
805233		VENTILATION SYSTEM	F			870217				13/503		13/503	
803430		ELECTRICAL OUTLETS >DG 110	T			861226				12/798		12/798	
803504		OVERHAUL TURBINE GENER.	T			370318				803/303		923/113	



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BJD IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

45	RUN DATE:	07/05/89	DOL-AR RANGE OF AWARD (\$000) K	AWARD AMT \$000	CUMPR-AWARD \$000	CURPRI	LAST MOD V3
PROJCD0:	DESCRIPTION						
861390	RPR TO ELEC DIST. Y-229	290318	466,000	69,022	532,022	-24	
861711	VENT. SEWAGE LIFT STATION C	570417	73,583	1,358	79,741	-31	
861714	RIV CONC/P-SLOCATE - INE	561026	42,765	5,321	45,787	-31	
861719	CONSTRCT TRUCK/RAIL-DOCKP	580419	65,000	20,371	105,371	-31	
861721	REPL. CAILLER BLDG. 310 Y	671229	85,000	1,397	84,503	-32	
861722	RPR BREACHING, BLDG. 3.30M	661216	11,223		11,223	-31	
661725	NEW ROOF JUTTERS O-1601	570218	23,400		23,400	-31	
861728	2ND EXIT FROM BASEMENT C	561026	15,863		15,863	-31	
861732	EXT. PAINTING FAMILY HSGS. C	570317	184,342	5,392	190,722	-34	
661735	RPRJ N.1&2 ELEVATORS	571119	23,643		23,643		
861740	TEL. SERV/EQPT. BLDG. 151 J	270171	24,400		24,400		
861744	MODIFY ASHC. PIT#-113	660525	10,750		10,750		
861761	ACCESS FLOOR PANEL PRRS. L	661223	10,500		10,500	-31	
861764	RFRS. C/H CRANES C	670521	32,860		44,860	-32	
861775	REPLACE CHAIN LINK FENCE E	670225	26,888		26,888		
861778	A/C TWO CLASSROOMS 3.355 J	670723	32,240		32,240		
861780	HAZ. WASTE STORAGE FAC. P	671210	191,903	4,367	185,367	-32	
861783	RE-ACCF NO PORCH OTRS. 4.3	260301	12,154		12,154		
861790	PAVE PARKING AREA 3.425	661121	19,350		18,860		
861788	TELEPHONE SYSTEMS 340,342M	670521	101,303		221,308	-35	
361605	INSTAL. AIR COND.	670223	43,000	3,415	51,415	-21	
861309	TAPE STORAGE BLDG. 157 B	670317	14,300		156,389	-32	
861611	BOLIER REPAIRS BLDG. 113 S	521224	28,892		28,892		
861814	HVAC-PISTOL RANGES 3.44J	560425	19,985		18,885		
861615	NEW OFFICE AREA BLDG. 1171	970121	17,342		17,342		
861823	REPL. PRIVACY FENCES HSGS. P	670213	78,303		323*	-31	
861629	REPAIR CARPORTS	670128	41,463	132	41,465	-31	
861832	ALTS. RJCIC OFFICE 3-DG. G	661223	22,353		22,353		
861664	REMOVE COLUMNATION TOWER	971222	26,500		26,500		
861665	TOILET RENOV. BLDG. 12C C	930115	68,553		2,308	-31	
662102	LADY RESTRM BLDG. 22/235 J	671210	59,500	5,533	65,033	-31	
862106	RPL. PJAPS. # 00 # 3	670314	133,000		133,003		
862108	STRU. RJS'S BERTH 11 C	661224	263,453		270,136	-33	
862109	RPL/INS. ROOF BLDG. 137, 235P	971121	90,437	71,573	162,113	-35	
362114	NETWORX XFR REPLACEMENT C	650321	260,597	333	261,533	-32	
862116	BOILER/TURBINE MAIN IN/RER H	530531	974,739	35,052	1,010,841	-20	
362117	GEAR REJTA. FACILITY J	671214	2,04,533	5,536*	2,99,503	-32	
862123	RPL. APR. SITTING HSGS. BLDGT	571211	2,697,003		2,843,388	-15	
362125	APAS TO OVERHEAD CDRS	671112	24,243		24,243		
362126	REPAIR TO TURBINE D	820429	140,755		139,743	-27	
862127	DECO. HSGS. 15 AND 2.26 23AC	520315	3,348	3,348	203,523	-33	



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BJD IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

F#	RUN DATE:	DOL-AIR RANGE OF AWARD (\$000) <	AWARD AMOUNT	CUPRI MOD-AMT AWARD	CUPRI MOD-AMT AWARD	LAST MOD-N#
43	07/05/98					
859512	REMOVE ASST INS. A/C & 150C	8611229	129,983	25,244	155,227	-02
859517	CARD READERS	860117	24,985	24-	24,985	-02
859518	INCINERATOR BLDG	C 8605036	81,990	24-	81,975	-02
859519	SIDE WALL RE/W/LNU/SCPJ	E850303	24,950	24-	24,950	-02
859521	DOMESTIC HOT WATER H+30 T	850729	87,200	87,200	87,200	-02
859521	PARKING AREA 9,442	851127	13,525	18,525	18,525	-01
859523	MODIFY WATER SYS. E&E	850726	23,514	4,334	27,318	-03
859524	UNDERGROUND FUEL TANK H1	C 8505025	14,800	1,000	15,300	-02
859527	NEW DUST BAGS	P 851119	12,413	4,477	16,395	-03
859526	FAC HT TANKS E,179	G 851125	13,922	15-	15,922	-01
859532	A/C DJ-T B-147	R 851128	11,400	11,400	11,400	-01
859536	REVISION FOR PIPING SYS	N 870120	197,511	557	198,378	-03
859555	AMBULANCE ENTRANCE 3.1	G 870328	101,350	10,-	112,038	-03
859556	OXFORD AVE ENTRANCE	E 860411	17,203	630	17,933	-01
952999	RR SIGNS	S 691124	103,945	109,-	109,945	-01
859782	FA1 HS3+- ADDL. PARKING O	670701	11,983	2,745	14,733	-01
859784	INSTAL- ADD'L ESA'S	C 870314	103,-	13,153	122,363	-03
860104	VEHICLE MAINTENANCE SHOP B	E 871218	1,000,-	91,514	1,097,514	-07
860110	HAWY LODGE FACILITY	B 870330	2,695,-	65,-	2,662,145	-14
860222	WATER DISTRIBUTION SYSTEMS	B 370710	133,000	1,916,-	131,384	-01
860461	STATION DRAINAGE P	P 871028	193,500	3,-	194,712	-03
860462	TEMP LODGING FACILITY L	L 870916	3,083,-	27,185,-	3,115,-	-15
860463	COMPL EDF DEFAULT CONTRACT	870515	223,-	1,790,-	221,-	-04
860452	HOT WE-L & SUMM HOUSE M	M 870334	684,-	7,570,-	471,-	-05
860400	REPAIR AIRCRAFT RAIL AREA	870228	2,934,-	87,751,-	3,-	-07
860261	RR/SA-TS SENECA LAKE DETM	871101	214,-	1,225,-	215,-	-06
860066	TORPEDO MK22ADCM LIFE CYM	630510	2,030,-	36,-	2,067,-	-03
860102	UEPH UPGRADE/HTC W/T LAKED	330129	2,177,-	243	70,-	-29
860137	FIRE A-ARM SYSTEM	271116	63,-	34,-	102,-	-05
860196	RPA STATION FUEL PIER	W 371229	355,-	70,-	355,-	-01
860307	PLAYGROUND AREA M	M 335328	47,-	64,-	47,-	-04
860314	MOB BOILER & TRNU STRUCTA	870221	144,-	263	144,-	-03
860300	RECREATION FAC EXPANSION L	870424	193,-	43	195,-	-03
660202	RPA STA PERIM FENCE (P-152E	C 830423	73,-	70,-	79,-	-01
302109	PP35 T2 FOOD PREP AREA H	C 870721	101,-	333	101,-	-01
560114	RE-DOVE REPLACE IN/OUTS INC	H 890531	232,-	300	234,-	-02
302115	ALT EDF VENT SYS. 9103 H	H 970530	114,-	397	109,-	-07
302116	REMOVE 15HECTOS SIDING 3400 C	H 670429	223,-	500	230,-	-04
860116	REPL-ACE TRANSFORMERS S	H 870327	95,-	933	95,-	-01
860117	RPA THREESTILE 2	P 820327	57,-	70,-	60,-	-01
860222	RPA THREESTILE 2	P 271230	944,-	714	944,-	-01



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BOD IS PAST AND ACTUA.  
SOURCE: CMS EXTRACT FILE

44	RUN DATE:	37/05/35	DOLLAR RANGE OF AWARD (\$000) <	PKCDOC:	DESCRIPTION	QTY	AWARD AMT	MOD AMT	CURPRI	LAST MOD BY
						AMOUNT	CURPRI-AWARD			
861630	Y3739/FIRESMCKE DEFECTO RC	870136	18,374						18,374	-01
861631	REPAIR STLM AND CODENSTK	871331	178,000						174,929	-03
361630	RPR DAMAGE CON'TRAVNER C	870713	13,444						13,444	
861640	INSTAL - HEAT PLANT E	871133	13,500						13,500	
861645	FIRL EJAC S ALARM SYSTEM A	870831	23,580						24,725	-01
861646	RPLC RDPF-SANGAR 175 G	871231	136,650						136,650	-01
861649	RENOVATIONS TO OFFICE S	880424	59,100						59,100	
861650	WLL-CW GROVE ROOF REPAIR G	871023	66,450						66,450	-01
861652	ALT TO ENLISTED MESS C/PNP	870538	139,715						147,792	-02
861650	RPR COAM OFFICERS MESS M	551331	691,257						591,591	-03
861654	DEMOLITION BUILDINGS L	671135	39,992						39,500	-01
561650	HANDICAP FACILITIES B.1 G	870317	74,850						78,425	-03
951652	CAM AIR COND. W/HG. C	870316	37,493						37,493	
861660	ALTERATIONS BLDG. 143	661130	24,000						24,000	
861665	INT. & EXT. PAINTING S	870531	25,000						55,144	-02
861672	PPR ROOF, 3-DG. 38	360312	195,380						189,050	-03
861670	BASEMENT RENOV. BLDG. 677 R	870728	304,640						323,753	-04
861670	ROOF REPLACEMENT B.76	861114	21,210						21,210	
861627	REPL. T&J ATTTL. S3.315 C	870224	42,522						44,385	-02
bo1629	REPL. PIPING D. 68	870113	20,300						23,025	-01
861630	ACOUSTIC DEADLING B-1171 M	870129	39,565						39,565	-01
861630	ROOF PEEL. BLDG. 03 D	870222	165,000						165,000	-01
861638	CHLORINATION STA. -4WTN G	870917	54,497						58,265	-02
861642	REPL. PIPING D. A5. 6 14 P	871211	386,515						465,215	-02
861653	ROOF REPL. 444.673 E	870420	153,831						160,340	-05
661654	REPL.#2 COMPRESSOR H 3-1154 E	870421	22,475						22,475	-02
861665	PHYS MDDS F10 BLDG. 3319 I	370235	12,945						19,345	-01
861650	VENT. CONST. 3446 E	561123	22,000						22,000	
861669	REL. - 3D. PIPE, 22, -P S	900328	123,000						146,707	-03
861654	CONNECT BLDGS. 11763447 I	870518	225,895						233,735	-03
861652	RPRS. CARPORT ROOF/SEL. F	861138	20,855						20,855	
861657	COMPUTER RM/A/CB. 921	870336	13,747						18,513	-02
861658	REL. EXHAUST FANS 3-292 P	670320	67,303						68,220	-02
861660	VENTILATION V. BLDG. 440 C	870710	25,933						27,297	-02
861664	WINDOW REP. BLDG. 1-A F	870127	12,063						11,741	-03
861665	QUITER-MASSTORY RPASS. 1172P	871222	57,000						57,000	
861670	CANDY'S 1277 WEST. 114 M	870717	69,475						69,475	
861671	VIVYL WALLCOVERING 3. 442M	871222	24,843						29,377	-01
861675	LEATHERSEAT OF EX 3. 428443L	871116	167,000						173,904	-01
361650	RPRS TO OVERHEAD DOORS K	870512	162,583						165,262	-03
861668	RPI5 VEHICLE LIFTS 3. 7 M	390125	63,283						97,432	-02

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CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BJD IS PAST AND ACTUAL  
SOURCE: CMS EXTRACT FILE

62	RUN DATE:	07/05/65	DOL-AW RANGE OF AWARD (\$000) *					
PROJDOC	DESCRIPTION	BUD	AWARD AMT	CURPRI	MOD AMT	CURPRI-AWARD	LAST MOD N.	
857650	CONDENSATE LINE	K	\$61010	147,737	147,797		-05	
85785c	RPRS TO LEAD TO BLDG 14,20M	K	87102	201,883	204,515		-01	
85766U	STORM SEWER REPAIR 4053	K	87103	293,592	329,467		-01	
85765	REPAIRS TO BLDG 603	C	830129	371,880	386,285		-02	
857674	CON INVERV MEMBRANE	D	66023	66,602	68,224		-04	
857693	REPL EVAPORATOR TUBEES	P	25028	255,337	108,553		-04	
85790U	INSTAL JWL'S MK20, 2445 115	E	83110	213,200	225,289		-01	
857908	REPL SIDING NRC	E	86014	24,967	27,383		-01	
857917	PINTADOF REPAIR	A	851127	48,704	48,704		-01	
857932	SEAL PARKING LOT	T	880127	24,900	24,900		-04	
857938	MOD. STEAM DISTRIBUTION Y	Y	872118	171,654	177,718		-04	
857939	RELOC SRV STATION 2D5 LIN	Y	870321	240,000	240,000		-02	
857940	UPGRADE ELECTRICAL U	U	861111	145,303	31,656		-05	
857972	STEAM DISTRIBUTION STATEVK	U	870330	197,383	11,791		-05	
853306	ALUMINUM SIDING 3BLDGs	3453	630523	57,333	57,833			
853314	ALUM SIDING BLDG. #10	B	650123	169,775	189,975			
853333	REPLACE GARAGES C	C	851125	24,511	24,511			
853346	GLAZED CURTAIN WALL - P-145	C	850124	13,400	13,400			
853452	CONSTRUCT BATHHOUSE B	B	861112	115,485	118,759		-02	
853434	RPRS TO SNOW BLDG	B	650124	20,361	15,327		-02	
853500	INST GWT FURN GENERATOR V	V	851116	22,994	353		-01	
853501	INSTLL GOVT GENERATOR #30	V	851128	21,500	21,500			
853504	ROOF R. B-1 M	M	550319	27,000	27,000			
853528	REPLACE ROOF #45	M	851126	21,082	22,262		-01	
853776	AGRESTIS REV	F	861124	32,000	70,200		-05	
853779	MISC INSULATION INSTAL	F	870125	32,000	50,000		-03	
853936	INSTAL A/C UNIT C	C	850122	11,000	11,800			
853940	NEW ALVINJM WJORS N	N	351130	12,300	12,200		-01	
853906	REWIRING OF QUARTERS C	C	861115	73,000	32,619		-01	
859031	EOASRE INST BLDG 3 S	S	860327	122,190	741		-02	
859332	HOLLOW METAL DOORS		870126	19,800	19,800			
859117	OUTPATIENT PARKING -CT	D	851121	43,413	5,655		-03	
859225	PARKING LOT S	S	860122	22,593	22,899		-01	
859244	INSTAL TWO FIRE STANDPIPEK		860119	16,445	16,565		-02	
859245	MEZZANINE/MATER LIFT J-11J	C	870110	49,433	49,433		-03	
8592502	INSTAL A/C E-105A C	C	870110	46,732	47,035		-01	
8592504	REV.FOZ A/C 3-150 C	C	661113	82,493	90,610		-01	
8592506	NEW OVERHEAD DOORS 3-112	C	870122	13,320	13,320			
8592506	COVF. 24.GWCK-UP 3-1173 C	C	870114	73,493	84,228		-04	
859511	REVISE DISPLAY LAH N	N	851110	63-953	91-503		-02	

PNMDF-STAFF1.CNTL



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE JDD IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

41 RUN DATE: 07/04/63

DOLLAR RANGE OF AWARD (\$000) <

PROJECT#	DESCRIPTION	COP	AWARD	AMOUNT	MOD AMT	CURPRI	LAST MOD YR
857196	RPR CONCRETE	\$ 860726	53,791	53,791		53,791	-72
857204	SEC ADJ TO COMPUTER PERIM	U 560129	57,555	57,555	66,489	66,489	-72
857220	CONSTRUCT ARIES II	J 851236	135,344	135,344	136,431	136,431	-72
857275	B-1000 RPR CEILING/IGHTS	J 861128	65,153	65,153	25,256	91,409	-75
857294	CONSTR TEST'S STOR 3LD's	P 850131	174,403	174,403	4,374	179,774	-74
857372	RE-DOOR DLOIS. #2	L 860523	24,273	24,273		24,273	-72
857381	PAINTING OF WATER TANK	P 860523	32,973	32,973	32,973	32,973	-71
857394	ALUMINUM SIDING BLDGS. #43L	860523	71,533	71,533	71,533	71,533	-72
857704	WEHRY APARTMENT 1425 R	R 851215	623,513	623,513	436,668	436,668	-72
857701	INCINERATOR RPL 83-4	U 850923	145,903	145,903	2,922	148,722	-71
857702	ROSEY STREET EXTENSION K	K 851217	79,697	79,697	79,697	79,697	-71
857705	RIDGE REPL BLDG 91123	J 851219	279,453	279,453	17,791	297,231	-72
857706	REPLACE TRANSFORMER	W 890224	53,103	53,103		58,100	-72
857712	ADOTS & MDS TO VACUUM	D 850424	103,903	103,903	523	109,177	-72
857719	REPLACE 4 ALP HAND-IEFS	I 870522	182,222	182,222	1,538	188,584	-71
857726	RELACE STEAM & COND D	D 861124	415,003	415,003	7,936	407,366	-71
857726	FAMILY HOUSING	P 870514	165,703	165,703	41,539	207,738	-76
857729	REFOF FLDG 301 OLATHE	G 850721	12,554	12,554		12,554	-74
857731	DEMO F-JIDILED 301-EP	N 860326	339,303	339,303	5,928	345,129	-75
857732	FIRE ENDURANT INST -ATION	N 870124	29,013	29,013	5,592	35,712	-71
857733	DEMO SEWAGE DIGESTER S	S 851223	103,003	103,003		103,003	-71
857732	REPLACE AIR COMPRESSOR A	A 860526	91,685	91,685	91,685	91,685	-71
857740	DEMO O-45 AID VACC-J-AIR S	S 860413	174,003	174,003		174,003	-74
857720	DE-42, B-2023-NYC	G 860719	77,803	77,803	546	79,345	-74
857502	REPL FIELDWATER CONTROLS D	D 850715	133,903	133,903	5,955	144,955	-73
857507	MISSLE PAD SITE PREP,	K 860317	347,045	347,045	29,922	377,445	-72
857310	REPL. OF EXL. WINDJAS N	N 850730	345,003	345,003	22,241	367,241	-73
857317	REPL. OF FLOOR TILÉ J	J 860127	68,249	68,249		68,249	-71
857914	CONDUCTIVITY REPL. SOL-EPU	J 850529	43,473	43,473	43,473	43,473	-71
857521	ROOF REPAIR/MRC/ MADISON R	R 861231	135,003	135,003	17,500	119,500	-71
857522	REPAIR SANITARY SEWERS Y	Y 860317	44,350	44,350	5,724	40,525	-71
857524	ROOF REPLACEMENT L	L 860525	62,333	62,333	62,333	62,333	-72
857525	DEMO ASH SILO BLDGS 3511	L 860126	15,853	15,853	15,853	15,853	-72
857520	DEMOLISH COAL SILU. B-11 N	N 851219	35,803	35,803		35,803	-71
857629	FLANAS-E STOPPAGE	K 851218	195,243	195,243	195,243	197,500	-72
857634	DAMAGE CONTROL TRAINER F	F 860717	134,444	134,444	1,435	135,922	-73
857535	DAMAGE TRAINER F	F 860527	135,013	135,013	350	136,367	-74
857536	DAMAGE CONTROL TRAINER F	F 850729	123,304	123,304	4,951	136,255	-75
857544	RPR BRONX SUN AVENUE K	K 850731	97,463	97,463		97,463	-71
857545	REPAIR PARKING LOT M	M 850530	163,973	163,973	163,973	163,973	-71
857547	REPL OF HIGH LIFT > JMP D	D 870324	63,903	63,903	67,489	67,489	-74



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE MOD IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

RUN DATE:		07/05/83		DOL-AR RANGE OF AWARD (\$000) K		AWARD AMT		MOD AMT		CURPRI		LAST MOD N.	
PROCDO#:		DESCRIPTION		302		AMOUNT		CURPRI-AWARD					
855974	SEC IMP-BLDG.7-3-#11	M	570129	74-243	74-293					84-225		-23	
855070	WINDOW REPAIR &EDC/4 FIVEL	M	650124	35-945	1-135					37-237		-23	
855408	COMPILING CONSTRA DOCUMENT	M	850121	14-215	2-277					24-193		-21	
855434	EXHAUST GAS COOLER MCUS	K	251126	13-205	875					14-182		-21	
855708	RPL PARKING LOT AT VRC	T	85050	14-815						14-815		-21	
855710	RPL PARKING LOT G	G	850219	15-500						15-500		-22	
855720	DAMAGE CONTROL TRAINER	F	371128	194-444	1-274					195-718		-22	
855707	PARKING LOT REPAIRS T	T	651121	15-107	2-518					17-587		-21	
957000	REPLACE WATER HEATER	31506	860228	33-503	10-456					43-255		-22	
857006	THICK FILM FACILITY	J	851210	313-000						318-000		-21	
857010	REGULAR TENNIS COURTS L	L	95050	35-688	150					35-833		-21	
85711d	PP MT AVAC IN SLUDGE	C	970519	195-375	5-931					202-305		-23	
857119	STEEP ADD 3-2940	I	860310	345-242						345-262		-22	
857326	CONSTRUCT 3RD DECK	L	870122	147-129	9-299					156-132		-22	
857331	EIEL DICK 314-22ND DECK	T	850224	193-295	15-343					216-928		-24	
857332	ALTER JACK II COMPUTER	T	560319	79-775						79-775		-22	
857337	LANDSCAPE/SIDEWALK RPL 316	M	560511	21-729	1-220					23-229		-22	
857342	NEW PARTITION WALL T	T	871227	17-493						17-498		-22	
857346	RPL INCADESCENT LIGHTS	B	560215	12-213	100					12-213		-21	
857350	ALTS T) CLOSS. 355	B	650511	235-261						235-381		-21	
857357	ALT. T) BLDG. 355	G	871111	1-417-220	330-570					1-447-570		-23	
857358	ADJN T) BLDG. 2592	J	870529	142-220	4-192					154-095		-21	
857354	REPAIR OF BUILDINGS H	H	871116	312-285	5-565					317-925		-22	
857362	HWY RESURFACE /PKNS LOTS O	O	861123	392-168	35-273					428-246		-24	
857363	RPL ROOF VAR BLDGS A	A	861118	225-222	19-759					244-777		-21	
857070	SOILER RPL 3-77	T	861215	45-925						45-925		-22	
857071	REPL. CUND. LINE AND PUMP	M	650117	21-255						21-255		-12	
857072	ELECTRICAL CONDUIT	G	870211	2-063-000	65-322					2-125-303		-22	
857074	FIRE-DIRECTECTION	J	850705	185-413	12-357					12-357		-22	
857075	REPLACE EAIL/TURNOFF	S	880227	3-432-000	1-717-269					1-714-651		-20	
857076	REPLACEMENT FOR COSE LABSM	S	640527	33-107						33-100		-21	
857381	SPILL CONTAINMENT STRUCTUS	S	860223	35-279						35-377		-22	
857386	FIRE-DIRECTECTION CAST CACB	B	870328	295-715	12-713					309-422		-22	
857086	RPR/ATS 3-DG 2601	N	370426	92-000	11-723					11-703		-23	
857394	ALT TO 3-2521	G	970710	137-500	747					137-747		-22	
857091	RPL GENERATOR EH-150	C	861229	97-593						97-593		-23	
857392	INSTAL. OF COND F-301HGT	C	850424	192-300	45-925					235-395		-21	
857393	INTERIOR PAINTING	H	870114	77-285	21-359					98-655		-21	
857394	CU-VERT EP-L4T	S	871112	265-675	5-274-					260-201		-23	
857395	RE-OLOCATE COMPTROLLE?	S	871125	221-881	3-713					230-394		-24	
857396	STCNE ROAD MAINTENANCE T	T	361126	233-345						233-345		-21	



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 32D IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

39	RUN DATE:	37/05/86	DOL-\$R RANJE OF AWARD (\$000) *	DESCRIPTION	90J	AWARD AMT AMOUNT	CUPPRI-AWARD	CUPRI	LAST MO V92
855109	SPILL CONTAINMENT PLANT 25	851221	27,271			5,232		33,253	-03
855117	CONTRJET NEW PAVEMENTS R	830411	94,931			250-		94,431	-01
855119	RPRS T J FIRST FLR WINDOSS	870412	61,433					61,433	-01
855180	PINEHURST HEATING G	860512	33,433					40,547	-03
855224	RPL OF GAS TANKS & PUMPS F	860310	95,554			5,333		101,866	-02
855332	PLATFORM RAILINGS U	861212	44,003					44,303	
855365	DENTAL CLINIC RECOV N	820315	25,591					41,583	-04
855370	RENOV T J OFFICE/LOCKER RMN	850310	57,223					62,251	-03
855377	DEMOLISH INCINERATOR M	851031	77,587					84,619	-02
855367	WAZEHOUSE CONVERSIO 6-#2C	820731	152,845					187,772	-04
855739	RENOVATIONS TO BLDG #3 D	870717	87,003					197,192	-03
855740	ROOF RPL BLDG. #12 D	831211	72,802					90,802	-01
855749	EXEC WING REHA3 M	860110	23,884					28,171	-02
855691	CONNECTIONS 3- 2, 3, & 5 M	851226	17,403					17,403	
825704	RPR RR TRACCS Y	860313	263,352					263,383	-01
855605	REPAIR RAILROAD A	871216	355,413					467,343	-05
855905	RPRS T J TOI-ET FACILITIES	820732	192,111			5,333		204,117	-04
855906	CONSTRUCT OFFICE T	851220	15,81					16,781	-01
855910	ALTS E-TRANSWAY B-109 T	860418	26,003					26,003	-02
855916	LIGHT 3-1254211-212 S	851212	109,335					109,335	-01
855922	INSTAL. PELV CONCRETE S	800113	55,982					63,268	-02
855926	RAILROAD TRACK MAINT B	851127	85,203					97,315	-01
855929	CONST NEW TOILET H-07 L	870218	72,443					70,243	-03
855930	RPR STREET CROSSINGS Y	861214	262,773					266,584	-03
855931	EMERGENCY GENERATOR P	820515	29,777					29,777	
855932	RPL ROOF B-3113 ANJ 311C S	851139	74,573					73,755	-01
855937	ROOF RRZS J-2033623D A	861113	97,957					148,328	-03
855939	FIRE DEPT CONNECTIONS A	860228	97,603					92,802	-03
855943	Y955A EYEWASH AND SHOWER H	850721	42,224					44,362	-02
855944	RPRS T J FAULT DAMAGED EQUIP	855121	12,565					10,996	-01
855949	DOCK LEVELER & RAM? P-12 R	850221	11,287					11,287	
855951	REPR RJD'S ATRS X-Y, 6, 2 H	860217	65,302					65,302	-01
855952	DEMO F-JOULIGHT TWAS H	860119	12,983					12,983	
855954	CONST TEST ROOM FACILITIES	860411	112,557					119,557	-02
855953	INSTAL. FIRE ALARM C	861215	14,363					14,363	-01
855960	CONSTRUCT SALT STORAG R	860517	103,503			1,258		110,768	-04
855965	CONSTRUCT RAMP N	870513	22,753					22,753	-01
855966	RE-LOCATE RAMP 2	861219	36,751					35,223	-03
855967	RE-LOCATE TRANSPORTER I	870112	19,353					19,853	-01
855971	CRANE TEST PAD K	871116	72,653					72,653	-01
855972	PAVE PARKING LOT R	850515	32,347					32,347	



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 32D IS PAST AND ACTUAL  
SOURCE: CMS EXTRACT FILE

R#: 8551130	RUN DATE: 07/05/86	DCL-AIR RANGE OF AWARD (\$000) K	AWARD AMOUNT	CURPRI-AWARD	MOD AMT	CURPRI	LAST MOD V
PRCD0#:	DESCRIPTION	303	AWARD AMOUNT	CURPRI-AWARD	MOD AMT	CURPRI	LAST MOD V
855104	REPAIR AIRFIELD CONCRE SJF/C	651115	313,920	23,592	343,502	-25	
855112	CHSTR 2RC-F43 MTL STG 3-GR	851118	113,000	292-	112,703	-25	
855117	COV INFRA/LEAS LAU	851201	233,000	47,675-	190,525	-25	
855121	REPAIR EXTERIOR WAT-	871129	212,473	212,473	212,473	-21	
855125	REPAIR SATELLOTH R20FS-A-2G	861121	522,200	522,200	522,200	-26	
855126	REPAIR PROJECT HRC-33 F	860544	214,313	214,313	214,313	-21	
855130	FENCING AND STANDS C	851220	16,165	16,165	14,445	-25	
855135	RPR PLATFOR SHED BLD 1	870410	67,000	1,540-	65,460	-25	
855136	REPAIR PAVING ZONE 32 R	851125	265,123	266,123	266,123	-21	
855139	REPLACE SUBSTAT 4A2,S P	851121	172,777	7,206	179,783	-21	
855147	REPLACE ROOF BLDG 1 A	860520	127,753	5,000	133,753	-21	
855148	RELAC WIND WALL B-DG 25 A	860334	135,300	937	135,387	-21	
855150	CONSTRUCTION AWARD A	860530	95,263	95,263	95,263	-21	
855150	INSTL 42" DIA VALVE K	860717	28,205	780	28,286	-21	
855157	CENTRIFUGE & RENOVATIONS N	871221	65,365	7,941	94,286	-25	
855168	TACAMO OFFICES BLDG 1 R	851122	165,111	165,111	165,111	-22	
855170	ALTERATIONS TO BLDG. #3 R	861122	189,319	6,383	193,707	-25	
255172	MAGAZINE CONSTRUCTION K	860339	247,265	450-	247,485	-25	
855176	REPAIRS TO RAILWAYS A	871114	553,553	553,553	558,562	-22	
855103	RPR IRON FILTERS B-DG 352C	860217	89,803	5,686	95,349	-01	
855104	ROOF RPRS BLDG #355 P	861128	24,997	15,400	40,297	-25	
325107	INSTL DF "WALK-IN" DODHT S	850129	83,097	19,577	107,767	-27	
855109	RPR STORM SEWER SYSTEM Q	850210	163,000	3,239	163,288	-22	
855110	PAINT AIRFIELD MARKINGS L	860310	41,025	3,744-	37,282	-22	
855120	INSTL OF FUEL OIL SYSTEMS P	861110	107,863	107,863	107,863	-22	
855124	FIRE MAT REPAIRS	860131	23,500	1,540	25,143	-24	
855125	TEST RAILWAY CONCRETE RR D	860124	13,221	17,219	37,117	-22	
82133	INSTL INT FIRE ALARM SYS C	860525	10,272	10,272	10,272	-22	
855134	SECONDARY CONTAINMENT V	851216	11,352	1,250	12,402	-21	
955136	MASONRY RPRS TO BLDG #50	860328	35,985	5,227-	29,773	-25	
855141	MASONRY RPRS TO BLDG 150 B	860526	42,200	2,212	44,212	-21	
855147	CONSTRUCT EQUIPMENT MAINTS	861122	53,887	2,241	56,133	-22	
855148	CONSTRUCT HIGHWAY MARKERS	860318	43,987	5,307	49,295	-21	
855154	REM EXISTING ENTRY DOOR V	850535	12,995	1,400	14,395	-21	
855153	MISC VENTILATION PROJECTS R	870510	92,200	92,200	92,200	-21	
855154	MISC VENT SYS YLD 148 C	870523	23,488	23,488	23,488	-21	
855157	RPR OF "LEAN-TO-ROOF"	860515	47,700	47,700	47,700	-21	
855161	PIVCHULLS ELEVATED CDS. R	860334	52,983	52,983	52,983	-22	
855161	RPRS TO B-SIDED POACHES T	851120	20,035	2,550	23,135	-21	
855164	MASONRY RPRS TO BLDG. #39	860517	17,500	17,500	17,500	-21	
855167	UTIL. TO RELIGIOUS CENTER	870525	71,605	1,165	72,913	-25	



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE JDO IS PAST AND ACTUAL  
SOURCE: CMS EXTRACT FILE

PROCDOC	DESCRIPTION	30D	AWARD AMT AMOUNT ACCOUNT	CURPRI CURPRI-AWARD	MOD AMT MOD-AWARD	CURPRI CURPRI-AWARD	LAST MOD-NR-
853944	RPRS TO BLDG C-9 MAINT	A	850532	34,833			
853951	DEMOLITION BLDG. S-147	L	660511	14,999			14,999
853952	IMP TO MAIN ELEC SYSTEM	L	870516	545,000	32,143	577,143	-26
853953	J GROUP PAVING	M	860236	294,000	318	294,318	-21
853954	BRIDGE REHABILITATION	T	661231	563,241	141,439	711,628	-23
853956	M GROUP SECURITY FENCING	C	660317	151,151		151,151	-21
853961	CHAPEL EXPANSION	P	670410	157,657	177,392	177,342	-29
853960	IMP. TO WATERFRONT "MC"	P	861212	157,803	17,355	175,655	-26
853970	REPAIR QUARTERS "E"	F	C51017	13,358	2,494	20,852	-23
853970	NORMANDY ROAD PAVING	H	851118	271,825	5,239	277,055	-21
853970	RENOV TO BLDG C-3	F	970421	67,365	2,577	72,035	-25
853973	ROOF & MISC OFFICE RPRS	M	870521	382,721	33,300	427,721	-24
d2456	6203 MOD A/C SYSTEM	P	850521	54,445	54,445	54,445	-02
854600	INCREASE ELEC CAPACITY	L	661227	95,423	3,300	93,700	-22
854605	COMPRESSED AIR PIPING REENS	S	861213	313,743	5,650	324,395	-22
854607	5353 RR A2124	S	660321	121,353	39,550	160,500	-17
854607	B-13 OIL STORAGE FENCE	S	350410	15,733		15,733	-21
854607	SECURITY FENCE TANCK FARM	M	551222	34,825	8,392	43,217	-06
854610	UPGRADE MEETING EQUIP	S	870220	60,655	4,333	64,889	-05
854619	CONCRETE PLATFORM	P	870719	29,411	2,300	31,711	-21
854633	ALTS TO SEC GROUP	C	851018	22,503	2,933	25,433	-06
854684	METAL FRAME STORAGE	G	660310	78,000		78,000	
854690	BLDG # 519 ROOF REPAIRS	M	860314	105,975	18,330	125,275	-22
854691	RPRS TO HAYMEREHEAD CAVEN M	M	870837	237,700	13,533	252,633	-05
854692	RM OF (2) FUEL OIL TANKS	M	871230	267,503		267,503	-05
854696	DISTRIBUTION UPGRADE	M	871216	722,700	32,370	754,370	-23
854505	SWITCHGEAR'S TRANS 3EPL	F	890217	495,000	15,887	511,887	-26
854506	RPL OF 2.3 KV SYSTEMS	A	880120	584,000	3,845	575,155	-33
854506	RPL COMPRESSED AIR PIPING	F	870734	323,000	11,175	311,825	-23
854512	RPL RH THACKS	A	660330	414,493	379,499	355,303	-21
854513	RPL 2.3 KV SWITCH GEAR	F	880115	640,000	19,921	658,921	-29
82620	RPRS TO COOLING SYSTEM	F	871237	95,665	1,355	98,021	-25
85420	HEATING SYSTEM REP.	B	571216	221,151	3,935	230,255	-26
854216	ELECT ADVERTIZATION B-5420	B	670311	53,864		53,864	
85453	ELECT ADVERTIZATION S-120P	B	871210	42,212		42,212	
85464	QP- OF CONSENSE SYSTEM G	G	860731	44,435	2,300	46,735	-21
85425	SDGS. 1103 COMPUTER ROOMU	M	880322	343,000	4,170	352,170	-26
854600	DEW & REMOVAL WALLS	H	870323	644,983	65,912	710,301	-23
854603	DE-HUMIDIFICATION SYSTEM	K	871122	55,075	17,808	72,883	-27
854606	HANDICAPS RAMPS	S	870931	85,000	5,593	90,593	-23
854640	INSTL OF STEEL GRATTINGS	M	870112	116,888	4,000	120,883	-23



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 32D IS PAST AND ACTUAL  
SOURCE: CMS EXTRACT FILE

36	RUN DATE:	07/05/88	DOLLAR RANGE OF AWARD (\$000) *	BUD	AWARD AMOUNT	CURPRI	MOD AMT	CURPRI-AWARD	LAST MOD NBR
JJN10									
CDDOC									
>3384	REPLACE AIR CONDITIONING C	270524	112,493	12,754	132,267	-34			
>3385	RPR & REPL. BUS	871214	52,523	9,444	58,534	-33			
>3386	AC BLDG 135	890512	156,563	27,148	181,711	-35			
>3387	PAGING SYS 3LDG 29	860221	17,500	500	18,100	-01			
>3388	RPR2 BOILERS 625 & 409	851105	26,393	970-	23,220	-01			
>3389	FLOW MEASURING SYS	860222	26,847		26,947				
>3400	WIVON REPLACEMENT 3,83	860330	69,500	1,168	69,769	-32			
>3425	1ST FL RPR BLDG 41	860528	71,435	11,138	85,633	-34			
>3439	SYSTEMS LAB BLDG B1	860315	55,574	1,485	58,159	-32			
>3453	INSTL-M PROJ EQUIP	860524	16,500	113-	14,487	-01			
>3463	MOD TO VENTLN SYS 396	860226	15,340		16,340				
>3465	RPRS TO STEAM DIST.	871124	193,303	22,220	213,203	-02			
>3466	INST SOLAR HOT WATER SYS	860226	43,280	1,122	46,402	-03			
>3473	UNDERGROUND TANK EXCAV	850322	-	21,454	19,181	-01			
>3477	LITHIUM BATTERY	870221	29,890	500	30,390	-01			
>3486	PROVIDE SHALLOW DRAFT	860527	12,139		12,139				
>3495	STORM DAMAGE/ARM HJS/143	851120	25,000		25,000				
>3504	RPR2 PIER FENDER SYSTEM	870324	95,304		95,304				
>3505	REPL OF DPS & FRAMES, ECG	650105	37,314		37,314				
>3715	INSTL 10T WATER HEATER	851217	15,540	721	17,261	-32			
>3716	RPR & ALTS BLDG #1	851213	12,180	500	12,580	-01			
>3727	INSTL OF VEHICLE GATES	660301	10,750		10,750				
>3728	INSTL GRAD 200TH, VAS	860321	13,500		13,500	-01			
>3729	SECURITY FENCE IMPROV.	880101	13,750		13,750				
>3741	SECURITY FENCE REP2.	880221	12,950		12,950				
>3743	4TH FLJDR ALT. & RPR NRC P	850518	148,000	2,220	157,200	-01			
>3320	ROOF & WALL REPAIRS	861030	32,900		32,900				
>3333	REACTIVATE HEATING SYSTEM	870119	223,220		223,220				
>3334	PAINTING/EXTERIOR REPAIRS	851122	86,660		86,660				
>3342	RPL OF CHIMNEY & LINING	851217	17,000		17,000				
>3362	RPR2 TO 1ST FLP B-R2	860212	53,000		22,220	-01			
>3363	ALTS FOR VET I'MSP OFFICE R	860227	13,000		13,435	-02			
>3380	EXT REPAIRS & PAINTING	851115	32,000		36,000	-01			
>3387	RPR SWIMMING POOL FAC 571T	850517	15,217	5,100	18,617	-01			
>3389	DEMO & GS R427, R423,	851125	73,463		78,463				
>3393	REPLACEMENT OF DRS 3EV	860115	11,830		13,471	-01			
>3397	MOTOR OPERATED HOIST S455P	851230	35,922		35,322	-02			
>3403	RAILROAD MAINTENANCE	851227	4,567		691,505	-05			
>3405	REEL OF PT TRACK SCALE	850427	9,215		9,215				
>3420	REEL OF MAGAZINE DAS IV	650216	305,001		305,001	-01			
>3435	ROOF REPAIR TO 3LDG 3 C-29P	860123	39,700		39,700				



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BDO IS PAST AND ACTUAL  
SOURCE: CMS EXTRACT FILE

RUN DATE: 07/03/88

DOLLAR RANGE OF AWARD (\$000) <

: 58JN30

PROJDOC

DESCRIPTION

AWARD AMT

CURPRI

LAST MOD YR

PROJDOC	DESCRIPTION	BDO	AWARD AMT	CURPRI	LAST MOD YR
352603	FENCING AT VAR LOCATIONS T	870427	11,922		
352811	RPRS T J FEEDER NO. 3 H	850121	33,722	3,950	42,572
353312	CLEAR TREES R/W 17-35 S	850210	105,500		105,500
353902	INTERIOR PAINTING A	951215	13,975		13,975
853906	REPLACE BOILER 9 #35 E	851022	23,975		23,975
252920	HR1-85, HOUSING REPAIR A	860730	24,942		24,942
852925	PARKING LOT EXTENION Y	860834	27,522		27,522
823005	REZONE HEAT. BLDG. 300 P	850929	23,811		24,711
353309	RPR ROOF POWER PLANT R	851115	47,322		47,322
853311	REPLACE FUEL LINE COVERS C	650123	24,302		25,235
353318	CONCRETE SLAB BLDG. 517 H	851122	15,692		17,062
653213	BOILER REPLACEMENT S	660916	52,502		52,972
853216	PAINT FACILITY EXTERIOR A	870921	14,202		14,202
353319	PARKING AREA LIGHTS B	850131	13,462		13,159
553220	MASONRY & WINDOW REPAIRS N	870216	32,022		33,744
953301	REPAIRS TO WAREHOUSE S	830228	355,802	20,413	377,218
353306	SITE PREP BLDG 627 L	870414	133,002	3,407	141,407
353308	UPGRADE ATMOSPHERIC CONTRC	871130	84,732		84,782
353311	RPR PIPE & DUCT H	860221	44,002		44,002
823315	RPRS BOILER #1 BLDG 29 A	860715	46,362		57,424
953316	RPRS STACKS A	861110	453,834	2,263	461,167
853320	RPA ELECT DIST SYS 3-DG 970	851120	16,213	2,169	18,387
853325	RPR FEEDER AT NS9 C	850623	13,395		10,395
653328	CONSTRUCT SEC FENCE A	851123	13,677		13,677
653331	RPA DUCT D	860930	64,021		64,021
353332	RPL AIR COMPRESSORS D	830324	645,225		667,869
453333	RPRS AC 8445 C	860331	134,493	1,291	135,784
653335	RPL TURBINE G	850520	15,982		16,982
953336	REM OF EXISTING ASBESTOS A	860534	13,362	1,313	20,173
353334	RPR ROOF BLDG 427 D	850228	85,002		85,002
353335	ADJ+N T J BLDG. 93 L	671122	133,335	25,097	156,932
853336	RPR BOILERS/QTR U THRJ UH	851126	53,502		53,502
653336	ALTS & RPLS TOILETS 915 R	851212	21,962	2,370	26,742
353336	PROVIDE DEEP DRAFT CAMELSN	860521	334,883		334,883
453337	FLJE DAMPERS S	251121	12,883		12,883
853372	RPL AC BLDG 427 C	561129	117,732		153,107
353379	REPAIRS TO ROOFS P	870634	246,502		209,188
853380	D22A/CYSTALL PREVENTERS A	870522	52,352		52,352
353381	ELEC'S VENT MODS VAR 6-DGD	870930	157,232		160,147
853382	RPLS TO PIERS MECH/SYS. G	350222	185,354	32,440	217,794
853383	RPL MECHANICAL SYSTEMS H	870538	65,802	2,302	69,600

PVWDF.STAFF1.CNTL



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 300 IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

34	RUN DATE:	37/05/85	DOLLAR RANGE OF AWARD (\$100) <	DESCRIPTION	300	AWARD AMT AMOUNT	CURPRI CURPRI-AWARD	LAST MOD VBR
381130	PRJCODE:			9LDG 22 COMM ROOM	\$ 650523	149,665	1,835-	-10
				REL STEAM FEEDING	\$ 650211	64,369	41,175	105,526
				LOCK STORAGE BLDG. 172		24,675		-37
				RPR/RP - FIRE ALARM SYSTEMS	\$ 670700	12,865		24,675
				ALTS TO THE CLUB PORTSMORETT	\$ 600215	77,254		12,865
				PICNIC PAVILLION	\$ 600213	39,295		77,254
				B. H-1 COMPUTER ROOM	\$ 650413	154,653	7,940	39,295
				REPLACE OVERHEAD DOORS	\$ 870215	33,153		162,449
				DD2 INSTAL TEST POWER	\$ 860703	62,747	3,000	-07
				B. 301 RAC 3BALL CRV ER	\$ 660519	16,238		33,153
				RP - HOT H2O&STEAM LINES	\$ 871125	783,474	12,455	62,747
				TRAFFIC DIRECT SIGN	\$ 650129	21,600	631	793,233
				SLATE ROOF REPAIRS	\$ 851122	17,985		21,600
				POWER > ANT REPAIRS d.72	\$ 890617	779,603		17,985
				HYDRANT REPAIR-ACEMENT	\$ 661117	05,200	2,124	779,603
				RP - COND TANK</PUMP> PIPING	\$ 870218	94,772		05,200
				RENOV OF BLDG 2130	\$ 860519	73,440	14,717	94,772
				RPRS. TO AIR CONDITIONING	\$ 860511	11,733	2,563	88,157
				BLDG 178 BIRD CONTROL	\$ 851212	22,225		14,293
				PRO-RP/RP'S TO MI-DANGER	\$ 861110	19,729		3,613
				54-71 VINYL FLOORING	\$ 660214	17,650		14,293
				INSTL - BACKFLOW DEVICES	\$ 861121	175,105		17,650
				INSTL OF NALCOMS NETWORK	\$ 660513	1,116,217		175,105
				MARQUE REVIS & EXT PT	\$ 860211	20,500	1,725	1,116,217
				35KV SWITCHING STATION	\$ 860512	221,657	1,473-	20,500
				CLEAN & INS'D SEWER LINE	\$ 651210	85,225	521,311	221,657
				DEMO OF WEATHER TOWER	\$ 850210	27,500		85,225
				GLOSS REPL AWW GUARD	\$ 851221	12,600	777	27,500
				REP TO HKR 3	\$ 860915	431,662		12,600
				SECURITY FENCE HGR 2	\$ 860128	33,294	113	431,662
				REP'S TO RECREATION FAC.	\$ 871212	281,465		33,294
				RE-LIGHT BLDG 250	\$ 660113	19,383		281,465
				RPL SM PT R&E STATION	\$ 870109	67,300	984	19,383
				RE2 ROOF BLDG 533	\$ 851217	44,800	9,715-	67,300
				HANGAR 2 SNOWGUARDS	\$ 661217	22,375		44,800
				STEAM PIT REPAIRS	\$ 861110	92,000	6,522-	22,375
				AVIATION'S SECURITY FUNC	\$ 860110	29,260	1,113	87,471
				STATION SIGNAGE	\$ 860516	12,432		87,471
				PAINT JANAR 3	\$ 660511	23,977	562-	12,432
				PAVE STRIPPING	\$ 850715	28,289		23,977
				RPA PAEMENT	\$ 660325	51,203		28,289



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BOD IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

PROCDOC	RUN DATE:	37/05/98	DOLLAR RANGE OF AWARD (1000) K	DESCRIPTION	BOD	AWARD AMT AMOUNT	CURPRI CURPRI-AWARD	MOD AMT MOD Nbr	LAST MOD Nbr
351704				FLOOR 3 PL. BLDG. 121	870311	\$5,250	27,769	84,019	-04
851705				INTERIOR DOORS-BLDG. 292	S 371213	21,000	5,395	26,395	-01
351708				ROOF REPLACEMENT, 3442	D 660510	53,000	53,000	-01	
851706				ROOF REPLACEMENT, 3534	D 660515	24,000	24,000	-01	
851709				ROOF REPLACEMENT, 3520	B 851231	39,790	9,701	49,481	-01
851710				SKYLIT & ROOF REPL. 3507	H 880211	117,400	10,323	128,228	-03
851711				PAVEMENT REPAIRS 1285	N 560510	491,545	776-	490,769	-02
851712				SERVUANCE/MAN PASSAGeway	M 660718	69,807	1,315	71,122	-02
851724				ROOF REPL. BLDG. 596	T 860613	92,597	2,714	95,311	-01
321725				PIPING SYSTEMS INSTALLATION	N 650519	69,712	25,398	93,800	-02
351720				REPS & ALTS TO BLDG. 29	G 870422	95,400	10,359	105,459	-05
851735				RPR & ALTER PRINGLE MALL	M 880126	431,517	31,352	463,371	-07
851736				RPR STORMSANITARY DRAINSA	A 851229	21,873	21,873	21,895	
851739				ROAD REPAIRS	F 660512	79,155	443	79,593	-03
851741				EXT VESTIBULE BLDG.1170	M 870129	17,464	17,464	-01	
851742				DEMOLISH BLDGS MC-12, 112 R	351223	25,062	20,787	25,062	-03
851751				FLOOR LOOP FACILITY 3-1246P	860314	155,795	30,121	176,582	-03
851752				REPAIR HVAC SYST T	861223	227,000	47,900	257,101	-03
351754				FIRE PROTECTION SYSTEM	M 870115	47,900	2,144	50,944	-01
851756				FIRE ALARM SYSTEM 3-DG127R	860507	13,800	1,725	65,100	-02
851758				NEW ROOFING BLDG. 900 E	870522	63,375	1,725	14,567	-02
351759				RECALL ELEVATORS BLDG. 390	E 870524	14,557	74,462	87,760	-02
351760				SIDING/Windows 8-122T	H 960521	74,457	4,540	-	-02
851783				FENCE APRS	C 661126	83,220	87,760	15,742	-02
851785				TRASH ENCLOSURES C	D 651229	15,742	12,392	14,81,127	-05
351799				STORAGE-STAGING BLDG. 115 M	661123	123,693	27,437	37,473	-01
851800				STORM WINDOWS-DRS 21302 G	851220	35,385	1,089	68,532	-01
851809				NEW PARKING LOT B 122T B	851112	73,540	2,139-	540,522	-05
851810				EQUIPMENT INSTL dldgs. 1246M	870710	487,368	53,152	23,374	
851811				PEDESTRIAN BRIDGE 3-111 H	660520	23,974	113,853	113,845	-04
851813				PLASMA SPRAY FACILITY M	861126	113,853	2,992	105,701	-04
851816				WIRE WINDINGS TEST FAC 114 C	660526	93,313	12,391	77,300	-01
351817				CONSTRUCT PARKING -2T C	850213	77,300	730-	56,222	-01
351819				LANDSCAPING PARKING LOT C	860512	56,992	20,345	30,792	-01
85182b				PARKING AREA D	851123	29,985	1,307	53,158	-01
851829				INT.DET.SYST.d.E.313 A	870324	49,000	4,158		
251850				DEMO 5 ATKS AND 4 GRASESH	860224	53,074	7,231	60,755	-03
821831				DEMO 3 4064.C.P H	850212	66,328	7,700	80,373	-02
851901				9.124 INSY BEST CO/H SYS J	871216	141,400	1,373	141,400	
851902				PERA (355) OFFICE B-2,5.79 S	851227	125,467		125,467	
351903				APR TO ROOF S					



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE JJD IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

32	RUN DATE:	07/05/80	DOLLAR RANGE OF AWARD (\$1000) K		LAST MOD-NB.
PRJDOC	DESCRIPTION	B0J	AMOUNT	MOD AMT CURPRI CURPRI-AWARD	
851449	RPR ROOF, GALLY C-100	N	870326	165,699	-02
851455	EXT. & HEATING RPRS	C	870330	318,957	-04
851457	RPR ROOF, BLDG C-115	D	870113	198,800	-01
851461	LIGHTING/CEILING REVOV.	T	870430	53,660	-02
851462	TE-EPHOVE CABLES	N	251213	6,740	-01
851464	REPLACE VALVES	W	861127	195,161	-03
851471	"C" PKJ	P	871213	1,721	-03
851472	UNDERHNG CRANES	P	880228	1,643	-15
851472	1-3T J13 + 1-1T MONORAIL D	D	850223	58,151	-02
851472	25T PORTALS 3-KB/2-BANGORW-	D	880321	7,378,000	-02
851490	LANDSCPS DEMOLITY B-JG 100S	S	850229	13,220	-02
851605	ACCESS CONTROL SYS U	U	851127	33,875	510
851607	RPRS TO DEFENSE HIGHWAY C	C	651121	217,000	-02
851614	DEM'DOGS 46 AND 134 D	D	851121	18,500	-01
851619	POTABLE WATER CHLTDRS T	T	850421	89,330	-01
851624	DEMOLISH BLDGS. AS11330 P	P	851119	115,000	-01
851627	REFL FAN B-446, EXH SYS133P	P	860130	33,503	-02
851633	RPRS TO WALLS P	P	870827	62,000	-02
851633	REPL E-ECT FEEDERS SHB A	A	870815	295,000	-05
851636	REPL SWITCHE GEAR SUSTN 12P	P	860722	118,118	-01
851637	STRUCTURE RPR SUB.15 A	A	871124	95,500	-01
851638	REPL ENERGY GENERAT 21 67 P	P	860328	133,200	-02
851643	INST SWITC 4H 50, 105> R	R	860531	34,800	-02
851646	TRAFFIC CONTROL LIGHTS F	F	851221	22,445	-02
851647	ELECL SVCS 3-109 R	R	860325	67,140	-01
851648	REPL E-EC SERV BLDG 302 C	C	860327	1,227-	-02
851651	REPL E-EC SERVICE, 3342 D	D	860322	28,760	-01
851659	RPR ELÉC VAULT TANK FM3 P	P	860123	73,200	-01
851660	HEATING SYSTEM, BLDG 1245R	P	860214	12,612	-02
851667	INSTL ACCESS FLOOR 3-117JA	A	851126	27,233	-02
851668	DEM OF BLDG 1651 A/N USC A	C	850524	29,900	-01
851675	ROOF REPLACEMENT, 3447 D	D	860724	115,000	-01
851683	MISC INT'L PAINTING F	F	860312	203,282	-02
851694	REVISE FLOOR REPLACEMENT P	P	860226	22,753	-01
851696	ALTS T J EXIT'S BLDG 44U C	C	860115	20,325	-01
851697	REPLACE DOORS BLDG 556 C	C	851230	10,572	-01
851699	ROOF REPLACEMENT, 3 W-34 E	E	871218	55,092	-01
851701	WINDOWS B13, CANOY 325 M	M	860318	25,723	-01
851702	NEW GATE HOUSE, GATE 12 C	C	860131	42,633	-01
851703	CH-DRIVATION ST AS.116339C	C	860225	23,360	-01



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BLD IS PAST AND ACTUA-  
L SOURCE: C4S EXTRACT FILE

31 RUN DATE: 07/05/88

DOLLAR RANGE OF AWARD (\$1000) K

: 83JUN30

PROCED:

DESCRIPTION

AWARD AMT

ACCOUNT

LAST  
MOD 45:

DESCRIPTION	AWARD AMT	ACCOUNT	CURPRI-AWARD	CJ3PRI
MAS WINSWAL - RPR RP - F/A SYS 3-135 3 133	860430	D 561015	97,443	99,443
SLOPED 3000F RPRS C 651107	53,721	2,134	60,355	-22
L/L REVOV. TO BLDG 2703 T	142,862	547	143,691	-21
SAFETY MODIFICATIONS G	870530	203,989	12,255	215,254
VARIO. ATTITUDE TEST STANR	861226	119,003	52,500	119,600
REPRS TO ECOLARD SYSTEM J	870931	303,303	52,468	860,468
REPRS REVNOVATIONS 9-26 199A	850312	165,003	5,213	172,213
GENERAL REPAIRS DO 3 A	861114	266,003		266,000
BOTT N'DEL VANTUUS FLEETS	861229	1,456,597	15,287	1,470,284
OPERATIONAL CONTROL CTR R	860319	191,677		191,677
REPAIR WSTIC GEAR AL 320M	860331	7,023,195	709,265	7,731,460
CONCRETE FILLED PY-CNS P	851230	92,962	1,550	94,619
OVERHAUL/REPAIR ELEVATORS	830123	24,103		24,100
SAVITARY SEWER A	871119	1,898,053	55,431	1,953,489
DEMO STORAGE OIL TANKS H	870717	479,107	2,262	481,349
ALCM 1300S - PHS-5 H	871221	975,367	9,755	965,612
MODERATOR-HEAT-DINING F	870724	87,800		87,800
OPERATIONAL TRNP FIC 3	870428	2,182,485	32,365	2,215,352
MAIN-GAFF IMPROVEMENT FAAP	870422	257,255	27,255	257,226
RPR STATION ROADS O	870726	275,305	6,561	282,867
PAVE HOBBY SHOP H	870305	149,347	534	150,531
SMALL BOAT DOCKING FACIL.A	871229	95,506	11,911	78,415.
POWER/DATAPHONE CABLES Y	861227	847,003	143,680	990,680
PIER LIGHTING Y	860318	36,145		34,145
VARIOUS REPAIRS P	851222	386,884	5,573	391,557
WHOLE CENTER REPAIRS H	860425	772,003	21,328	793,929
OUTDOOR PLAYING FIELDS P	860525	681,003	45,775	726,775
REPAIR ELECTRICAL SYSTEM S	870511	343,003	3,280	346,280
UPGRADE SPRINKLER SYSTEM A	860124	72,723	12,923	85,543
RPR ROOF / 3-DG 318 H	870129	59,500	9,322	58,668
ORGANIZ MNT SHOP P	860718	535,300	63,421	486,573
WEATHERIZATION A	870319	464,587	2,800	472,387
RPR STEAM DISTRIB SYS S	880111	26,200	715	23,285
ABT CONTROL B434 U	870308	209,003	11,932	220,932
RPRS BY REPLACEMENT ROOF H	870318	145,203	11,205	156,205
RSSPS SPECIAL PROJECT R	870717	197,003	12,374	186,626
RPR ROOF BLDG 5 O	871213	218,392	7,720	210,699
RPR ROOF BLDG 2 SEC C \$ DA	861114	727,841	15,338	743,077
	851231	439,003	3,358	441,358
		23,501		23,501



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BLDG IS PAST AND ACTUA-  
SOURCE: CMS EXTRACT FILE

JO	RUN DATE:	07/05/88	DOL-AIR RANGE OF AWARD (\$1000) *	AWARD AMT	CUM-AWARD	CURPRI	LAST MOD VBR
ACCDU:	DESCRIPTION	90C	AMOUNT	MOD AMT	CUM-AWARD		
147066	REPAIR MAG WING WALLS	\$	860716	183,115	1,141	184,256	-02
147153	REVISIONS TO BLDG 1122	G	660346	663,000	2,450	671,400	-02
147059	REVISION TO HLDGS 2528	C	850910	260,000	13,945	270,945	-03
147070	REPAIR BRIDGE NO. 2151	B	851122	56,363	3,476	60,435	-01
147171	REPAIR 3PTIDGE NO. 2154	D	851126	34,700	15,500	51,300	-02
147372	RENO LAS 2922	S	871226	33,733	39,780		
147249	PASSENGER ELEVATOR 3/1000	S	850522	154,260		165,409	-05
147250	REFURISH 16 RESTROOMS	T	850312	255,200	9,543	264,643	-01
147264	PAINT/SIDING OFFICES 2TRJ		840918	42,974		42,974	
147378	REPAIR ROOF ARCHES 3-W10	A	870126	300,193	109,355	409,065	-05
147584	PATIO OFFICERS CLUB	W	850529	53,933	9,576-	50,362	-01
147390	FUEL STORAGE TANKS	J	860523	15,577		15,577	
147396	ENERG REPS TO RUNWAY	P	850731	17,051	3,949	20,000	-01
147350	EXTERIOR DOOR REPL M	M	250216	21,957		21,957	
147351	REPLACE WATER PIPEL 221216		860530	58,695	15,433	74,099	-01
147352	FIRE ALARM	W	860715	15,703	779	15,482	-01
147354	COULINS TOWER BLDG 34	N	841226	11,206	217	12,121	-01
147350	REPLACE CULVERTS R-199	L	850225	13,805		13,805	
147361	ADDITION H-163		850311	143,850		143,850	
147362	ROOF AND TRUSS APRS.	A	841221	89,325		89,325	
147370	SECURITY IMPROVEMENTS	F	850319	85,200	2,422-	82,580	-03
147377	ADD B-142 DRAIN B-33339	L	860526	207,400	1,145	208,545	-03
147369	MODULAR YLDG FOUNDATION C		850525	39,671	21,322	59,993	-02
147281	HEATING RECOVERY SYSTEM G		851111	54,380	955	55,345	-02
147342	REPAIR INLETS MANDO-E		871224	17,760		17,760	
147435	DROR TEST TOWER B-131	A	850320	27,536		27,536	
147338	HWY RESURFACE	O	850430	612,923	47,523	660,547	-01
147439	REPAIR EXT WALLS B-2524	J	660319	343,975	13,225	362,165	-03
147440	REPLACE A/C 32521-2540	M	851125	377,150	7,324	384,474	-04
147441	REPLACE AIR COMP 9120	H	851216	113,429	15,150	135,553	-03
147444	RENOV. TEST CELLS/HALL DAYA		850227	37,235	1,227	39,142	
147305	3IT JMN CONCREET REPS KJADP		250325	59,550		58,550	
147320	REPR/A-LTER SECND F-3 E-78C		950930	15,280		15,280	
147352	ALTERATIONS TO BLDG 3	H	871220	643,295	5,335	656,380	-06
147285	PAINTING AREA D	M	860719	220,000		220,000	
147387	CONVERSATION PLANT Y-JDS S	S	851127	76,551	3,737	82,500	-05
147393	DOOF REPLACE VARIOUS B-DGA		850329	255,000	3,171	258,171	-04
147390	POLY BARN 3LDGS. 2913	S	87C229	78,253	327	79,793	-01
147391	ADDTN 3-8559	T	870212	64,281		64,281	
147392	MECH A-T VARIOUS Y-JDS	M	860526	194,379	1,423	195,822	-05
147393	ADD & REPLACEMENT 3F BLDGS		870310	483,300	7,477	490,477	-10



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BJD IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

29 RUN DATE: 37/05/83

DOL-AIR RANGE OF AWARD (\$000) \*

PROJCDUC	DESCRIPTION	BUD	AWARD AMT ACOUNT	CURPRI CUPRI-ADAD	LAST MOD BYR
345526	LANDFILL CLOSURE K	850,30	481,79	53,712	-01
345538	HSS TEMP CONTROL MOD B-2G	841,120	93,444	2,550	-03
345576	TEMP CONTROL MOD B-2G	851,111	37,00	39,00	-01
345584	SECURITY FENCE 3 11/12 I	850,011	44,000	43,475	-01
345592	PLUMBING HRS	850,011	15,910	15,910	-01
345592	FLDW CJNTR-LLERS, 3-DG 12U	950,930	145,564	163,516	-04
345525	BLDG. 516 B	850,219	33,960	1,715	-01
345647	ROOF REPLACEMENT B	850,027	77,222	77,222	-02
345550	ROOF REPLACEMENT O	850,030	127,00	127,74	-02
345651	HOUSINS REPAIR 300 JUNITS C	850,030	630,980	25,311	-03
345652	GAZAGE IMPROVEMENTS B	860,718	2,655,335	73,613	-04
345653	CAPEHART HSS IMPROVEMENT S	850,325	1,133,829	12,635-	-02
345662	DEM. B-DG. 520-NYC 3/LCS P	850,011	85,660	51,171	-02
345663	DEM. O' BLDG 1116 S	850,011	42,930	3,334	-01
345665	DEM. TRANSFORMER VAULTS V	84,5715	11,750	11,750	-01
345673	EXTERIOR REPAIR-IC N	850,018	69,192	89,712	-02
345676	ADD TO FIRE EXTINGUISHING F	860,023	52,604	15,222	-01
345597	COPRIDR BARRIER WALL	870,218	11,00	11,400	-02
345698	SAMPSON STREET BRIDGE D	850,426	252,535	93,220	-01
345701	MAIN GATE SITE IMPROVE M	850,733	340,617	63,569	-04
345706	ROOF REPAIR BLDGS 322 N	852,111	139,372	198,372	-01
345707	ROOF REPLACEMENT 923 E	860,216	192,192	199,999	-01
345710	WIND. DOORS, SIDNG 3 PROJG	851,121	192,00	177,774	-02
345739	RPL ROOF NRC LACROSSE AI U	850,316	14,622	14,622	-01
345743	INSTAL. SHOWER POOL A	941,221	11,60	1,574	-01
345742	INSTAL. DRD>CEILING A	850,319	113,340	113,340	-01
345746	REFINISH ANTENNA TOWERS A	850,514	15,000	1,700	-02
345746	RECONDITION FAN BEARING T	670,430	21,500	5,381	-05
345757	RPRS T) INDUCED AIR FAN M	840,211	11,550	3,550-	-01
347J04	REPLACE BOILER 3-115 N	251,219	61,700	60,205	-01
347J06	3RD BAY 2ND & 3RD DECK 41A	850,117	472,227	3,221	-09
347J07	SECOND DECK MK36 B-41 T	850,11	92,265	13,650	-01
347J16	RPL AI 2 COMPRESSORS M	851,222	46,200	46,300	-04
347020	CULVERT REPAIR R	850,313	162,23	102,323	-04
347024	ALT. OFFICE P-64 N	850,31	220,442	37,377	-05
347J26	RENOVATE BUILDINGS 2307 T	870,527	33,982	1,250	-01
347J30	ADD B-2240	850,223	162,350	2,392-	-04
347J32	ALTERATIONS TO ALDS 2058 A	850,522	85,772	85,772	-01
347J37	WASH. FAC. 3-126 A	850,311	143,370	7,450	-02
347J42	ROOF REPLACE VAR. 3-DGS. A	850,311	252,200	25,208	-02
347J44	REPLACE BOUNDARY FENCE S	850,323	64,627	1,355	-01

PNCMDF-STAFF1.CNTL



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 300 IS PAST AND ACTUAL  
SOURCE: CMS EXTRACT FILE

L5	RUN DATE:	07/05/88	DOL-AR RANGE OF AWARD (\$000 K)	DESCRIPTION	B01	AWARD AMOUNT	CURPRI-AWARD	CURPRI	MOD AMT	LAST MOD NBR
-45154				PAEMENT MARKING & STAIN-L	861228	24,350			24,185	-71
-45157				CAD/CAM SPACES BLDG 562 A	850312	65,700	2,180		68,880	-72
-45159				ALTER 3-DG 39 OVERHEAD DOOR	850729	34,600	2,590		37,190	-72
-45161				BLWDOOR PIT TC 13-2	851215	221,300	91,533		316,533	-73
-45175				REPAIRS TO FUEL PIPE	861223	256,915	91,702		346,617	-73
-45177				CONSTRUCT NPC STORAGE 3 G	850474	79,000	1,450		77,540	-71
-45177				#2 FUE-L STOGE FACIL	861151	89,000	1,274		90,274	-72
-45178				INSTAL- WATER OPER. WELL H	850222	21,531			21,531	
-45181				ALT TO ELECT POWER SYSTEM	850128	16,455			16,455	
-45182				REPAIR CONCRETE ROADS B	860810	281,125	31,331		312,456	-76
-45205				CLENOJT CATPULT TUNNEL G	841222	110,170			10,360	-71
-45210				COVT EQUIP STOR BLDG L	850426	185,275	1,153		187,439	-72
-45211				REF FIRE ESCAPE B 17 E	850510	16,800	594		17,494	-72
-45218				INSTAL- HEATING SYSTEM T	870227	62,800	1,500		64,300	-71
-45220				CONST NEW OFFICES 215/307L	860220	1,043,125	27,468		1,072,594	-76
-45224				CAI."D" HOUSING REPAIRS L	860325	457,444	25,378		480,522	-75
-45235				COOPT RM 3LDG 607 L	850315	37,212	31,447		69,659	-72
-45241				ALT TO COMO CLU9 B 15 F	851111	43,353	1,375		50,435	-72
-45250				DEMO SEWAGE TREAT PLANT G	850725	140,000			140,000	
-45270				ELC SYS BLDG 311,312,410L	850814	171,500	2,539		168,811	-74
-45272				RESTROOM RECOV 3-12 A	860320	77,000			77,000	
-45272				CONCRETE LINTEL & JINDCM W	851218	282,300	42,750		338,260	-75
-45273				RENOVATE STAIRS, 3-2G #1 N	650228	22,500	22,382		22,382	-72
-45279				ALT. TO DMA B-27 P	650422	32,745	2,369		35,514	-72
-45281				NEW HANDICAPPED DOOR W	851211	12,400	5,700		18,100	-71
-45282				CONST RAMPS/OD DOORS B-36W	851223	13,750	3,364		17,094	-72
-45282				DEMASH -DAL ASH SILLS M	850319	67,653	1,347		69,000	-71
-45282				OFFICE RENOV. 9-1 N	850110	11,422	1,638		13,358	-71
-45289				FOOD SERV LINE REPAIRS H	850506	94,500	94,177		183,577	-76
-45334				EDMICS INSTALLATION M	851128	-	424,400		52,956	-73
-45350				RENOVATIONS TO RESTROOMS M	850518	14,258			14,258	-71
-45367				DOOR REPAIRS M	840713	15,250	75-		15,175	-71
-45372				850319	12,600	478-			12,122	-74
-45379				H/T BOILER REPLACEMENT E	841130	46,767	3,550		55,267	-71
-45381				EXTERIOR PAINTING N	841219	24,613			24,613	
-45383				VARIOUS REPAIRS K	850125	22,132			24,596	-74
-45397				REPLACE ELECTRICAL SYSTEML	841221	117,645	4,358		121,703	-72
-45318				MISC R2RS IT2 BUILDUP R2JFC	850729	21,561			21,661	
-45330				RMVE REPLC 3LTUM PAVING S	841225	11,380			11,380	
-45398				FURN INSTL SHWN FLNG V	840219	29,300			29,300	
-45314				ARCH REPAIRS B	850213	2,840,307	552,353		3,493,160	-15



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BJD IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

RUN DATE:	07/05/88	DOLLAR RANGE OF AWARD (\$000) <	DESCRIPTION	BJD	AWARD AMT AMOUNT	CURPRI CURPRI+ADJARD	LAST MOD YBR
-4665			HAZARDOUS ASTÉ FIÉ.D	G	871134	45,000	45,000
-4689			RP - ELECTRICAL DUCT	F	860114	45,700	48,425
-4692			HYDRO TEST TNK CONTAIN	K	860134	29,541	29,541
-4693			SKY-LIGHT REPLACEMENT	D	850930	143,000	146,580
-4696			CRANE SUPPORT STRUCTURE	U	851238	92,000	92,000
-4505			REPAIR ROOF	M	860522	203,880	203,880
-4506			POTASLE PIPING REP.-S	S	860228	47,774	45,355
-4706			XPD EXIS FUEL OIL FAC	M	850515	132,311	15,000
-4710			MARRIED OFFICERS QT'S.	D	850531	155,000	162,300
-4715			SECURITY DISINTEGRATOR	R	870215	115,123	52,355
-4716			REPLC DEFEC ELEC APPARATUV	U	860513	77,666	336
-4720			PAVING REPAIRS GTE 2 33	R	851127	245,123	30,500
-4723			REPLACE PERIMETER FENCE	R	860530	267,114	5,912
-4726			RENOVATIONS ZONE E-5	P	870721	110,794	110,794
-4753			CONSTRUCT POST OFFICE	D	870423	462,990	44,709
-4760			CONSTRUCT OFFICE AREA 3-1B	N	850329	233,520	12,219
-4780			CONST OFFICE AREA	N	870323	229,283	229,283
-4783			REPLACEMENT OF WAL-BR-41	R	850721	71,112	71,112
-4786			REPAIR ROOTS BLDG. 1&2	P	850920	555,000	11,515
-4788			WIRE MESH FENCE BLDG. 1	P	841210	41,862	41,862
-4790			REPR ROOF, BLDG. 14JA	P	841226	23,500	23,500
-4600			REPAIR HEADERS (SHR) AREAS	N	850329	68,791	6,000
-4623			PICNIC PAVILION	R	860530	38,721	38,721
-4627			REPRS ALTER MAIN ENTRANCE	C	850429	183,251	11,933
-4628			SECURE ADP FAC. C-35	M	871229	377,720	5,245
-4632			REPLACE BOILER #1,	P	860130	16,100	16,100
-4639			PPRS T) BLDG 70,	R	870635	85,215	9,495
-4659			REP STM SARS PKG-T 1	B	850312	163,134	163,134
-4660			TEST LABORATORY BLDG-Z	M	880224	83,345	86,832
-5101			EXT UTILITIES CON SJP CT	M	841121	64,500	199,384
-5115			RAMP WIDENING TC-13 CAT	M	850121	307,311	73,737
-5116			ADD BLDG 551	R	850925	750	308,261
-5119			ADTN T) B-255 FOR FITNESSC	R	850227	172,000	172,000
-5120			PAINT SPAT 300THS 3 169	H	350218	49,500	49,500
-5133			RPT ROOF, BLDG 434	M	870115	93,000	93,000
-5134			RPT ROOF BLDG. 480	M	870115	133,700	138,000
-5135			RPT HANGAR ROOF BLDG 194	S	870129	317,650	466,183
-5139			MEZZANINE FOR VORTH WING	N	660725	93,000	95,463
-5142			INC A/C CAPACITY B 120	D	851134	213,000	234,242
-5143			CONST 3 RP3 FOR 3/4.5 CV S	S	861022	107,700	146,595
-5152			NEA STORM DRAINING SYSTEM	M	850434	85,303	81,525



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 3JD IS PAST AND ACTUA-  
SOURCE: CMS EXTRACT FILE

26 RUN DATE: 07/05/83

DOLLAR RANGE OF AWARD (\$000) K

DESCRIPC	DESCRIPTION	809	AWARD AMOUNT	CUPRI-AWARD	CUPRI	LAST MOD NR
3595	INST DÉAERATING TANKS	3297	13,673	633	14,303	-02
3595	DREDGING CARD BASIN	1	350221	55,003	50,285	-02
3595	NEW ROOFING BLDG 43	NUSC N	850717	137,735	145,975	-01
3595	SSV 563 SHMR RADIO MCKJPC		850728	354,803	371,667	-01
3440	REPAIRS & ALTERNTNS BLDG 43 L	L	851223	165,883	248,593	-04
3441	REP AND ALT TO BLDG 64 A	A	860520	655,655	17,531	-03
3445	INST VAX COMPTR RM 3RD FLD		860227	265,314	4,733	-01
3450	PAPKIN LOT BLDGS 41 M	M	851226	88,007	5,425	-01
3454	CDE 325 CMPLT LAB RELECTNL		850521	98,980	105,983	-01
3459	PRVSN DF ALT PWR FEED TS6D		860328	19,565	5,271	-02
3474	ALTIRE 2 TO TRANSDUCER LABC		850527	156,125	157,436	-01
3476	A/C & DIVD'S PARTN FOR 397C		850221	15,873	15,473	-01
3477	MAG PLATFROMS REPRS A	A	850321	135,703	135,703	-01
3703	ROOF REPAIRS R-15 T	T	860630	128,203	123,203	-02
3708	NONMANDY ROAD PAVING D	D	850125	167,664	111,522	-01
3729	MAINT OF STATION R-3 FACIW	C	851121	63,143	179,164	-13
3771	REPLACE 5 KV SUB CABLE C	C	860219	272,307	263,514	-01
3779	DEMOLITION BLDG. C-35 M	M	850631	14,983	240-	-03
3785	ALTERATION VIDEO TAPE AREA G	G	850131	77,124	35,254	-01
3791	RE-PLACEMENT OF CEILING G	G	841122	157,195	731-	-02
3806	RPRS TO ELECT. DIST. SYS.L	L	861226	39,635	39,635	-01
3921	REPLACE INTERIOR DOORS V	V	850224	56,247	47,360	-01
3927	REL OF ANT 3 TRNS A	A	850321	49,552	13,553	-02
3930	RPL EXT DRS AT N & MRC W	W	850726	12,785	62,115	-03
3931	BLDG R-2 AT NRC W	W	850728	21,903	21,803	-01
3933	EXTERIOR OVERHEAD CRANE A	A	861228	33,003	33,203	-01
3941	EXTERIOR PAINTING OF AFRCY		851217	21,403	2,530	-01
3947	ROOF RR'S & SKYLIGHTS S	S	850217	65,211	23,903	-01
3949	INTERIOR PAINTING OF AFRCY		851213	13,655	22,655	-01
4451	RE-SAVING OF PIEP (S)	P	850325	233,903	19,323	-04
4453	SECURITY VAULT,BLDG 20	S	850217	5,331	71,562	-05
4458	ROOF REPAIRS dLDG 543	M	850213	362,303	362,303	-03
4452	REL HTS SYS K	K	860214	273,227	9,122	-03
4454	REL 8' AIR MAIN S	S	850328	33,943	39,973	-04
4468	BLDG 13 RPL EXHAUST SYS B	B	950218	22,521	23,445	-03
4469	REL-JBLIC ADDRESS SYSTEM		850630	55,003	9,523	-02
4470	23 RPL CIRC PUMP	K	860321	323,803	325,303	-01
4471	DRYDOCK #3 ALDG. #326	F	870314	73,503	42,255	-05
4476	BOILER REPLACEMENT T	T	851223	43,676	49,474	-04
4479	BOILER SLIGHT GLASSES S	S	860411	83,903	91,383	-04
4480	2.3 KV SWITCHGEAR REPL W	W	860221	364,003	360,963	-04
4482	FIRE DAMAGE E	E	850314	17,543	17,363	-01

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CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 3JD IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

25 RUN DATE: 07/05/88

DOLLAR RANGE OF AWARD (\$100) K

JCD#:	DESCRIPTION	B0J	AMOUNT	MOD AMT	CURPRI	LAST MOD NBR
			CU2201-AWARD			
12567	EX/INT PT 219,219,215,220P	860224	42,900	42,900	42,900	-32
12570	RE> PAVEMENTS PKG F C	870310	87,667	1,233	89,875	-32
12574	RE>OF BLDGS AT THE NAS P	851215	65,575	33	66,503	-33
12581	RE>OF BLDG 211 R	850524	52,123	52,123	58,409	-32
12583	ALT & REP BLDGS 12 3 23 L	850137	17,203	1,531	19,731	-31
12584	RECIRCULATING PUMP 3 235	860320	17,873	2,535	20,478	-31
12589	RE> 10" WATER MAIN C	860329	299,943	299,943	299,943	-32
12590	SUMMER STEAM SHUTDWN P	850327	133,303	2,381	135,581	-33
12590	RE>/ALT BLDG 223 C	861129	1,082,303	25,177	1,082,177	-11
12597	HGV 5 300F REPAIR S	860118	14,185	760	14,345	-25
12605	MNT. OF AC TAXIWAY _BAVNTD	841212	83,527	353	83,593	-31
12610	RPPS TO ROOF B-76 R	850530	36,880	6,322	41,183	-21
12611	RPR 3 PHS POWER SUPPLY L	850416	32,405	32,295	32,295	-32
12614	CHILD CARE CENTER F	851214	52,073	52,073	52,073	-33
12621	INSTL NEW SPRINKLER SYS H	650529	15,203	15,203	15,203	-33
12622	INSTAL - WASTE OIL TANK M	841228	12,865	12,865	12,865	-33
12623	INT PAINTING OF B-75 M	850730	27,777	27,777	27,777	-34
12624	ROAD REPAIRS M	841211	22,067	22,067	22,067	-34
12625	REPAIR FIRE ALARM SYSTEM P	850725	12,287	12,287	12,287	-34
12626	INSTL NEW SPRINKLER SYS H	850529	15,203	15,203	15,203	-33
12627	BOILER INSTALLATION B-SJ1P	860414	44,217	44,217	44,217	-33
12628	ROOF REPAIRS & TANS RE-LP	850415	63,737	63,737	63,737	-33
12629	REPLACE PC3 TRANSFORMER S	850127	73,323	73,323	73,323	-33
12630	UPGRADE FIRE ALARM SYS	870721	14,773	14,773	14,773	-34
12631	SHOWER STALL M	870227	192,752	192,752	192,752	-31
12632	APR EXTERIOR HOSP 3 #443 B	660318	215,225	733-	215,225	-31
12633	PROV GEN TELEP EXCH3 B-777	850131	61,403	60,703	60,703	-32
12634	REAL STREET LIGHTING LJDPL	860419	665,665	2,555	669,332	-26
12635	DEEP DRAFT SEPARATORS W	840229	127,793	22,494	143,484	-01
12636	DEMOLITION OF SOUND PIER W	841224	28,893	2,000	30,893	-21
12637	AC/DC TEST STANDS D	840327	12,415	12,415	12,415	-21
12638	RE> ECONOMIZERS B-2?	8350520	105,343	1,932	108,775	-21
12639	SEC POST & CHAIN SYS R	840417	24,843	13,323	34,843	-31
12640	AC & E-EC SERV 2ND FLR E	860525	163,823	1,217	163,217	-35
12641	PROV AIR CYDGT/RECYN CYTRF	850428	15,803	15,803	15,803	-32
12642	PHYSCL SECRTY SEAPNS AREAL	850423	83,883	9,450	93,333	-32
12643	RPL PNEU CNTRLS B 440 P	870211	65,593	2,532-	64,003	-33
12644	PEER HEATING SYSTEM B. 3JG	850411	53,593	3,320	61,993	-34
12645	NEW WINDOWS WESTOVER C	840530	724,303	17,197	741,187	-32
12646	RPR HOT WATER HTG SYS B	870227	194,234	33,193	232,482	-05
12647	RE> REPLACE BOILERS 223 S	851215	49,834	49,834	49,834	-32

P40MDF. STAFF1.CNTL



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BLD IS PAST AND ACTUA-  
SOURCE: CMS EXTRACT FILE

24 RUN DATE: 07/05/88

DOL-AR RANGE OF AWARD (\$000) <

JJD/DOC	DESCRIPTION	903	AWARD AMOUNT	CURR PT-AWARD	MOD AMT	CURR PT-AWARD	LASSI MOD NBR
41934	RPR STEAM TR COVERS, 835 S	850415	12,757			19,757	-02
41938	MISC ROAD REPAIRS	860711	45,023			45,023	-02
41940	ROAD REPAIRS	851215	204,132			221,664	-02
41940	RMV PC3 TRANSFORMERS	860430	99,104			99,515	-01
41940	RPL LIGHTING Y-155 AND 240C	850320	18,894			19,347	-01
41940	BLDG 93 MOTHBALLING	850517	372,783			485,385	-06
41940	RENOVATE RESTAURANT B-174B	860612	61,524			62,155	-06
41940	RE-HAB TO HOUSING OFFICE J	850324	147,574			147,574	-03
41940	B. 170 RENOV FRT ELEVATOR	870115	463,000			448,970	-06
41942	BERTH 13 SUPPORT FAC'S	850127				376,489	-01
41931	DC FEEDER BLDG. 300	870216	85,802			85,802	-03
41945	B-170 INSTALL SIDING	860228	51,422			51,937	-03
41946	ADD BA-CONY SPACE D#1	860515	12,703			24,350	-06
41951	CONCRETE RPR DD#1	840926	47,723			90,923	-03
41960	H717A/YEW LOCKER ROOMS	870427	178,200			182,793	-03
41960	UPS ROOM COOLING	850321	15,245			15,245	-05
41967	BRIDGE #2 NEW DECK	841212	254,575			313,112	-05
341968	HF LAB RENOV BLDG. 26J	871121	47,687			47,587	
41972	B. 195 - RENOV FOR VE 1 MAINTZ	850222	49,800			49,890	-02
41975	NEW DC ELEC DUCTS STCARD S	851125	32,865			55,474	-02
41977	NEW SHOWER FACILITY C	850411	33,503			30,503	-05
341982	NEW 24 DAY ELEC DUCT B. 11 M	860421	143,700			135,865	-05
41982	RPR/H/W PIPES	851116	113,835			133,505	-04
42011	B. 171 FOUNDATION/S-AB C	850729	22,262			23,762	-01
42014	INSTAL - ALARM SUP B	660523	18,503			19,215	-03
42017	INST MEZZANINE 3299 S	851218	62,000			45,508	-04
42033	RH 29 VIS RENOVATI0N	860716	87,452			87,452	
42070	THEE TRIM	850931	12,357			12,357	
42500	RPR. & ALT. TO BLDG 4.	860127	814,303			852,656	-06
42510	RPR & ALT BLDGS 381 & 332C	851123	865,200			873,780	-06
42517	REP STYLING VANHOLE	860731	60,000			68,477	-03
342517	DEMOLITION OF BLDG. 369 W	850524	403,700			501,503	-01
142527	YD22#, 2EST CONTROL 3LDG. K	250317	155,200			158,581	-03
42527	HVAC STM R#2 BLD 645 E	861227	43,263			49,663	-03
42528	YD23# EXIT ACCESS HANGAR K	850229	185,200			206,215	-06
42533	HANVEL PROS.	870521	15,500			15,303	
42535	UPGRDE ELECT TO 35KV	850531	180,932			201,467	-03
42543	REP/ALTER COMM STORE 8335L	860929	543,200			546,544	-06
42546	IMPROVEMENTS TO EM 2LU3 L	851216	76,934			79,537	-03
42551	REP % IMP TO BLDG 9 D	850720	130,953			130,953	-02
42563	REP BLDG 339 F	850721	110,803			109,531	-02

P4JMM0F,STAFF1.CNT-



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 33D IS PAST AND ACTUA.  
SOURCE: CMS EXTRACT FILE

23 RUN DATE: 07/05/83

DOLLAR RANGE OF AWARD (\$000) <

PROJDOC	DESCRIPTION	B0J	AWARD AMOUNT	CURPRI-AWARD	CURPRI	LAST MOD NBR
341617	EXT PAINTING BLDG 35 E	860121	24,333	12,540	35,273	-01
J41619	DOOR REPLACEMENT #2 355 C	950516	12,402	10,402	65,675	-03
341623	PUTABLE WATER CHLORINAT D	860120	55,002	3,375	683,000	-02
341634	ROOF R-RQS 3-1 G	860725	683,000	3,522-	229,919	-01
341636	MASONRY BLDG B-1 K	860121	22,342	2,342	105,775	-07
341651	INT RPS TO DR. BLDG 1 C	861125	81,472	26,375	72,095	-03
341650	REPL SEA PUMPS 68/315/3580	850514	65,248	5,547	39,083	-03
341652	MISC EXTERIOR PAINTING C	941026	32,483	5,139	60,329	-01
341667	HIGH VOLT CABLE, B112 L	950511	54,182	13,990	13,990	-01
341672	STAIRWAYS, 3113A AND 113 C	841218	84,1218	25,000	119,660	-01
341676	AUMS SYSTEM NW/C	860501	92,050	22,000	22,000	-01
341680	REPL SUV FEEDER R	850510	22,000	21,250	21,250	-01
341681	LIGHTNING RODS, BLDG 22 H	651114	21,250	7,349	96,548	-03
341682	REPL LOADING RAMPS, B1-47C	850211	87,000	302,203	367,000	-07
341684	ROADWAY IMP. VIC GATE 4 H	850524	21,439	9,797	25,251	-02
341685	EXTEND PIMARIES JN CH1 S	841120	22,302	3,951	197,219	-01
341686	SENSORS/LIGHTING SY 3229A	860725	19,213	13,400	19,400	-01
341688	REPL 23KV DISCONNECT, 145R	860517	15,215	1,175	16,590	-01
341695	CORRECT LIGHTING, 3163 F	850207	15,215	719-	29,221	-01
341704	RPL TRANSFORMER, TE-B22 J	850713	21,439	3,548	8,548	-02
341709	DEMO VAR BLDGS NETC NWT C	850503	73,000	137,000	137,000	-01
341710	ROAD REPAIRS NETC D	860310	137,000	5,220	63,200	-02
341732	CONTROL - RM EXP RLD3 127 B	850102	57,800	52,340	52,340	-02
341737	ROOFING REPAIRS, BLDG 95 M	850936	85,0936	17,400	18,700	-02
341746	FLAMMABLE STORAGE FAC.	850405	85,0405	16,7745	23,5245	-05
341748	INT PAINTING OF QUARTERS T	950212	95,0212	63,000	63,000	-01
341750	DEMO WATER TOWER A-52 D	861125	63,000	25,000	25,000	-01
341772	RP - FIRE ALARM CARLÉ	860127	25,000	21,483	21,483	-01
341774	C02 HOSE REELS, BLDG 112 9	870437	24,5413	35,548	282,261	-03
341781	RENCO 41GH DAY AREA, 1171C	251107	612,000	17,000	634,200	-03
341784	REPAIRS TO BLDG 35, G.I. A	860529	105,295	105,295	105,295	-03
341800	NEW ROOF @ 102T, 105 E	951229	180,948	3,539	182,537	-03
341901	RANGE STORAGE BLDG M	651129	43,000	43,000	43,000	-01
341905	NEW ROOF, BLDG 110 A	951227	71,100	3,428	74,598	-01
341907	NEW ROOF, BLDG 126 A	851220	87,235	23,125	115,560	-01
341910	EXT TELEPHONE DUCT, #75 P	350120	87,235	23,125	35,100	-01
341912	NEW ROOF, BLDG 165 3	651220	35,100	102,000	107,333	-03
341918	POLILER SAFING FACILITY C	850121	102,000	5,039	22,574	-03
341921	LANDSCAPING, GATE 7 H	870717	22,574	3,592	152,582	-03
341924	REPR 5 HSG UNITS	850115	142,000	123,000	129,156	-01
341930	3ASC EXT ARCH PLAN S	850719	123,000	5,156		

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CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 330 IS PAST AND ACTUAL  
SOURCE: CMS EXTRACT FILE

22 RUN DATE: 07/06/88

DOLLAR RANGE OF AWARD (\$000) <

PROJID	DESCRIPTION	REQ	AWARD AMT	CUMPR-AWD	CJAPRI	LAST MOD NBR
340515	RPRS T-J ELEC SYSTEM M	850101	64,200	5,550	69,800	-03
340516	ALT TEAPEST SEC INTL LAS	870111	519,500	7,711	529,211	-02
340518	C-9 ARCTF MNT HNGA S	880111	3,113,917	144,576	3,255,493	-19
340526	RPRS T-J TERMINAL ROAD P	850115	236,375	11,729	246,103	-03
340529	PPRS T-J CAPD & WOODS RD	850324	143,284	4,362	144,242	-03
340536	LEACH SITE CAPE COD AFS W	861118	12,763		12,763	
340537	REPR E-EC. SYSTEMS R	850239	121,200	31,261	152,261	-06
340539	FM-Y HSG. REPAIRS G	861114	3,094,322	89,130	3,182,352	-09
340541	RMVL & ROUGA GRADNJS	861227	23,575	1,222	24,597	-02
340544	CORRECT LFL STA DRAINAGE N	860121	68,325	33,554	719,590	-07
340604	DEMOLISH PIER A	861230	197,200	13,330	215,000	-01
340605	MAIN GATE RELOC/GATEHOUSE D	850518	566,495	5,500	590,502	-09
340608	T-2 SOUND-SUPPRESSOR	871127	402,805	12,395	422,906	-02
340610	OFF-BASE WORK D	870716	2,179,215	144,859	2,322,974	-16
340613	INITIA-AWARD A	860716	147,250		147,250	-02
340616	FUEL MANIFOLD VALVES A	870713	873,000	206,550	1,077,550	-10
340618	REPAIR TANKS AND PIPING A	860114	485,510	22,239	506,339	-04
340619	NEW OLD ROOFINS N	851119	176,671	11,738	188,408	-02
340620	REPAIR ROOF C	860119	1,195,500	33,354	1,229,500	-11
340622	SMALL ARMS RANGE D	860210	783,750	19,5	780,256	-06
340624	CHECK JAU LT K	870530	236,231	5,779	240,210	-01
340628	RPR/ALTER TRAINING BLD 31S	861110	153,500	27,580	267,580	-05
340644	RPR TAILACY LIGHTS S	850517	54,290	54,290	165,416	-03
340652	REPAIR ROOF E	880211	47,700	3,541	46,259	-03
340661	REPAIR ROOF T	870327	139,810	2,122	141,932	-01
340664	RPR STA PERIMETER FENCE C	861119	321,505		321,505	-02
340670	REPAIR HANGAR ROOF 3L 1 B	870530	281,360	745	282,105	-05
340676	A/C SECURITY GP/CUP C	860530	26,733	5,727	32,500	-03
340681	HRI-82 EXTERIOR REPAIRS B	860519	220,371	3,120	223,471	-02
340683	HANDICAPPED ACCESS D	870510	45,775	3,694	45,775	-02
340684	ROOF REPLACEMENT B-2G 711V	880623	342,750	19,995	359,355	-01
340696	REFUEL VEH-PARK HTD B	870703			573,654	-02
340731	FABRIC AND OPTIM BUIL FSI	840231	107,842		107,842	
340753	S-TDN OVERHEAD CRANE K	870328	74,744		761,273	-06
341455	FABRIC 50-TDN JET CRANE H	850125	481,935	53,645	540,881	-10
341462	POLLUTION ABATEMENT A	850129	33,550	1,217	37,843	-03
341605	PRIMARY POWER REPAIRS F	850525	185,900	22,317	209,717	-03
341607	RENOV TOILET FAC B 114 C	850121	25,447	2,352	29,109	-01
341613	RPRS E-EC SYST BLDG 1A A	850411	36,052	2,138	39,100	



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BID IS PAST AND ACTUAL.  
SOURCE: CMS EXTRACT FILE

21 RUN DATE: 07/03/88

J430 DOL-AR RANGE OF AWARD (\$000) \*

JCD0:	DESCRIPTION	B0)	AWARD ACCOUNT	MOD AMT CUPPRI-AWARD	CUPRI	LAST MOD NBR
JJ12	REPAIR SWITCHGEARS 3L	\$205	880331	432,000	-----	-08
JJ16	PIER 7 RPR	W	860312	1,437,540	224,233	1,731,873
JJ17	REPAIR FIRE SYSTEM	F	861112	976,250	22,775	995,225
JJ23	HR1-3-33	K	851122	2,970,300	315,373	3,255,373
JJ26	HR2-83	T	860525	2,407,420	163,816	2,776,235
JJ27	WHOLE SITE RRS JTRS G 3 FN		850523	76,740	-----	-03
JJ33	PR 3L JTR LINE EXTENSI M		860122	387,205	3,547	395,753
J043	RPRS J-RAUDITOT-VALVES S		8870530	553,810	-----	-01
J045	VACUUM PUMP INSTALLATION K		851129	12,369	-----	-02
J047	RPA POTABLE WTR PIPE S		871118	129,924	22,000	151,924
J048	REPAIR COMPRESS AIR LINE C		680150	584,100	75,239	660,339
JJ52	MA-E/FEMALE HEAD REPAIR D		860827	47,500	5,227	52,527
J101	REPR HVAC-JEPH 972 C		850320	515,240	24,441	539,581
J103	RPR ELEC DIST SYS FEED/R4S		850714	242,700	35,254	277,954
J105	TEST ANALYS B-633 1ST FLRG		850523	592,447	85,325	675,473
J107	PERISCOPE FAC ADTH A		850528	880,445	5,870-	880,575
J116	REPAIR ROOF. BLDG. 1000	Q	870311	444,440	-----	-03
J117	REPAIRS TO WHARF H	W	850730	267,805	65,458-	181,348
J122	RPR DUCTWORK-BOILERS U		871120	1,486,400	39,310	1,522,710
J130	RPR ROOF BLDG 105	M	861122	90,800	7,954	95,754
J137	REPAIR ROOF, BLDG. 663		850315	16,300	-----	-02
J138	D.P. FACILITY RENOVATION	S	840339	1,017,000	452,394	1,469,384
J142	RPRS/A-TS ACQ DEPT 27L G		870227	194,000	3,315	197,315
J144	ELECTRICAL WORK		870317	3,180,000	227,595	3,407,696
J251	TACAMO/GPS NAVGPN E2PT G		870317	-----	-----	05-
J256	DIESEL TRAINING FACILITY B		890223	4,438,840	21,335-	4,467,505
J270	SOLAR 4-EAT SYSTEM S		841122	13,444	2,929	13,373
J295	OCN SRVLC-BLDG-ADTY S		870522	2,069,661	74,188	2,123,849
J321	OIL SPILL PREVENTION M		870912	293,900	25,131	320,001
J354	YOSSA STAIR TOWER 3-DG114C		660318	184,983	12,977	195,960
J355	YOSSA STAIR TOWER 3-DG114C		660318	17,000	-----	-03
J381	TKAY T-5 AND STH APN REPB		870526	3,095,491	111,748	3,208,239
J385	COOLING TOWER RELOCATION S		850328	24,268	12,344	35,812
J336	EXTERIOR RPRS BLDG 3-CUTP		870423	179,000	7,224	183,224
J369	CONSTRCT SCID FLR C-SRM R		860326	74,052	-----	-04
J391	NE 4 PASSENGER ELEVATOR N		850729	179,313	1,459-	177,951
J432	NE 4 PASSENGER ELEVATOR D		880521	168,000	3,520	151,500
J502	MATERIALS SVS FAC ADDN S		850513	851,499	15,974	867,473
J505	MATERIALS SVS FAC ADDN S		860515	804,401	57,191	861,591
J510	ADD AIRCPT PKG GYMNAS B		871113	1,935,935	122,400	2,059,336



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BID IS PAST AND ACTUAL  
SOURCE: CMS EXTRACT FILE

20 RUN DATE: 07/05/88

DOLLAR RANGE OF AWARD (\$000) <

J:JU  
JDUC:

DESCRIPTION	905	AWARD ACCOUNT	MOD AMT CUPRI-AWARD	CUPRI	LAST MOD VER
RPL BOILERS 8-2574	H	860437	279,200	3,274	-02
REV C RAYS 11-13 9-33	T	250501	95,813	101,225	-03
2ND DECK AND OFFICE 9-59	G	850323	81,703	13,520	-02
REV CAVATE B-2087	L	560215	242,793	65,533	-04
REV CAVATE BLDG 2038	N	850228	850,613	315,523	-05
REV C. SECOND & 3RD FL. 41A	R	841107	129,435	158,279	-04
RPL F/A SYS	R	860513	99,000	33,438	-04
AIR COAP METERING	G	950715	45,200	46,200	-02
RP- UNDERGRND ELEC SYS	B	870715	230,000	253,703	-02
REP ROOF L/1203, 9430 ETCU	B	840525	179,123	179,123	-01
HELICOPTER INTERGRATN FACD	FACD	860310	339,000	363,384	-07
REPAIRS UEPH BLDG. 55	B	841213	329,344	328,344	-01
Y765A, SAFETY ALT.	L	850125	62,203	62,353	-01
REPAIRS BLDG. 27	H	870224	55,203	56,447	-01
HEATING KPRS B-#36	G	841107	99,793	98,793	-05
REPLACE ROOF BLDG. 521	E	840626	277,619	22,380	-05
RPR ROOF, WNDWS, DR SONG	P	840712	192,700	199,700	-05
PARKIN LOT PAVING	P	840225	731,173	66,172	-02
RPR STA CIV PORTER	K	851015	161,708	6,503	-02
RPR STA HOFFETT	D	851223	329,800	329,800	-05
ROAD & SIDEWALK REPAIRS	A	840725	587,503	97,455	-05
ROAD/SIDEWALK REPAIRS	A	850325	691,000	547,242	-03
REPAIR/REPLACE ROOF	K	841101	117,893	1,117,893	-07
STREET IMP.	M	870515	215,893	345,915	-02
ROOF PSS BLDG 91-H	E	850521	73,252	73,252	-02
ROOF REPAIRS	E	850310	100,763	100,763	-03
AUTOMATED ATA STARTER STAI		861219	192,522	192,522	-03
ALIGN BRIDGE CRANE RAILS	C	851107	24,952	28,624	-01
RPR/ALT TO CODE 504 OFFC	G	960221	443,803	45,773	-06
EXT REPAIRS BLDG 4J2	C	850522	17,500	17,500	-01
NEW ROOFING BLDG 1J2	D	85U726	129,200	5,792	-01
NEW EXIT DOORS	J	951028	73,500	73,502	-01
REP/ALT COE 203 VP OFFICES	J	851101	589,694	52,770	-12
REP/ALT COE 426 BLDG 1	C	930421	353,000	382,363	-05
REPAIR AC, 426 BLDG 1	C	870320	563,103	91,178	-03
REPAIRS TO AC38	L	850315	195,595	177-	-04
NC1-83 NEW MIL HOUSING	P	850313	112,211	7,200	-04
INSTLL FUEL OIL FDR TANK	P	850226	133,333	53,235	-02
INSTAL - J13 CRANES 3 BLDG	R	850330	115,754	186,369	-02
CROSS STATE SIGNALS	P	871111	1,420,577	15,766-	-04
FACILITY ENERGY IMST	L	871125	1,420,577	1,406,633	-04
CRANE RUNWAY	R		2,756	1,117,765	-03

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CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BLD IS PAST AND ACTUA.  
SOURCE: CMS EXTRACT FILE

10 RUN DATE: 07/05/88

JN30

2CDOC

DOLAR RANGE OF AWARD (\$000) K

DESCRIPTION	900	AWARD AMT	MOD AMT	CURPRI	LAST MOD YBR
		AMOUNT	CUMPR-AWARD		
REPRS TO VAR ELEVATOPS S	860211	449,800	12,211	462,703	-02
EXT FACADE RESTOR 3-D 29 A	860214	112,213	17,-09	129,522	-02
DEBRIS BARRIER WING-1 SYS N	851223	132,211		132,711	-01
CIA FENCE C	860111	79,-317	24,-339	104,-255	-01
DEMOL & REMOV VAR 3-DGS. D	350221	84,-220		84,-220	
REPAIR HVAC SYSTEM 3LD3 2C	851118	85,250	13,-311-	83,-339	-01
RENOVA SCORSBY LAB 3-1 G	842117	32,-125	95,-278	125,-03	-05
COLDLNS WATER SYS 3-0 C	841119	87,-735		87,-735	
HAZARD WASTE FAC P	851119	135,-000	5,-392	142,-592	-04
REPRA-ATER CENTER AUDITORE	870316	225,-400	1,-359	227,-759	-03
ALTERATIONS FOR TEC1 DATAA	840514	32,-800		39,-800	-02
CUST R&T MAINT & JPR 3 G	840511	65,-475	759	87,-245	-02
PFRS T2 FREIGHT ELEVATOR P	830213	63,-71		69,-111	
RPR TO ELECTRIC LINES 3	850123	213,-200		254,-335	-03
NEW FUE- OIL BURNER BLDISN	650129	51,-173	5,-515	56,-585	-01
RPRS T2 BOILER #A D	850125	121,-100	12,-371	131,-171	-03
ALTER ELEC. SUPPLY 3-139 S	840517	15,-34		15,-384	-01
2400 VOLT LOOP B	860219	179,-000	14,-392	192,-322	-02
ADDITION COMPUTER 300M M	850122	113,-280	1,-359	115,-183	-02
RPRS T2 ROOFS 9	861126	42,-339	19,-287	69,-485	-03
REMOV & REPL VAR TRANSFOR	851121	97,-400	12,-359-	85,-442	-03
REPR FIRE ALARM SYS VA2 R4	861125	72,-000		70,-200	
RECEIVING DOCKS BLDG 129 M	850326	154,-613		167,-395	-01
RPR ROOF BLDG 305 T	840330	312,-000		331,-000	-02
ALT. MAISE. MECH. BLDG 227L	840327	335,-800		470,-235	-07
TELECOMMUNICATION DUCTS L	840327			201,-351	-05
DUST COLLECTOR & VENT SYSE	850116	155,-263		129,-229	-03
MASONRY REPAIRS S	841110	23,-554		23,-554	
RPR LIGHTING BLDG 35 L	850131	125,-297		148,-812	-07
INST PORTABLE WATER MOBIL M	840215	92,-000		126,-323	-01
REPR SANITRY SEWER M	850129	32,-000		29,-002	
HAZARDOUS WASTE N	850110	17,-000		17,-200	-05
SEED ENGINNE SITE E	861126	19,-224		19,-224	
POOF REPAIRS O	840117	772,-200	3,-311	789,-211	-01
DEMOLITION OF BATCH PLANT N	840211	12,-800		19,-800	
NEW SPRINKLER SYSTEM A	850111	104,-400		107,-263	-02
MAZAZINE I	850131	387,-255		432,-543	-02
TEST C-4ABERS B-143 M	970324	62,-400	579	49,-933	-01
INTERIOR PAINTING H	850518	92,-000	6,-319	97,-319	-02
ALTS. TO BLDGS 37 AT NMSC H	860326			128,-387	-04
REPLACE BOILER 2-BD-2737 G --	850121			681,-581	--01

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CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 3JD IS PAST AND ACTUA-  
SOURCE: C4S EXTRACT FILE

16 RUN DATE: 07/05/88

DOLLAR RANGE OF AWARD (\$100) <

JNNU	CDOC	DESCRIPTION	90)	AWARD AMOUNT	CUPPRI	CUPPRI-AWARD	MOD AMT	CUPPRI-AWARD	LAST MOD 4B2
2738		EXT PAINTING, FAIRY HSS, C	870331	35,610	3,522-		31,893	-03	
>2751		TPIDENT SET/UP FAC 112M	840237	223,942	11,437	235,423	-01		
>2752		RPS. NO. 2 XMER, SJR 7 C	851229	95,555		95,255	-02		
>2753		REPLACE IC'S SUB STA. 7 O	840225	124,203		124,203			
>2764		RENOVATE TOILETET, 3-DG 11S	840514	113,257		14,529	-03		
>2788		STORM DRAINAGE, CHI, UTSS	807225	69,175	5,178-	64,367	-03		
>2799		WA-K RRS VETC C	851226	45,773		45,773			
>3306		ALT/RP2 BLDG 166 2ND FLR L	860127	385,003	9,278	394,278	-05		
>3336		PROJ. 4TG. ELEMENTS A	830437	11,403		11,403			
>3544		REFINISH GYM FLOOR K	860328	56,003		56,003	-01		
>3555		SITE PREP ADP FAC 333 L	870122	74,464		74,464	-02		
>3561		RENOVATIONS TO 3-141 A	850315	97,003		119,172	-05		
>3569		ALT'S SOUTHEAST SIDE L	871326	94,812	2,755	97,577	-02		
>3701		RPR FIRE DAMAGE QTRS 6103E	831311	12,463	1,155	13,615	-02		
>3705		CONCRETE PLATFORM/MALL REPRS9	841317	125,782	23,314	156,295	-03		
>3709		RP2 BOILER MESS HALL K	841121	184,403	3,420	184,403	-03		
>3707		ROAD REPAIRS W	850137	152,003	22,155-	136,835	-04		
>3714		REPAIRS TO FENDER PILES C	841334	263,159	459,538	721,347	-09		
>3725		RACQUEBALL COURT ADDITION	850137	87,663	7,132	96,669	-03		
>3814		FLEET MAJORING PROJ CAEPHARTA M	850131	239,203	5,235-	232,715	-05		
>4453		NF-11>PROV PROJ CAEPHARTA	851231	169,703		168,703			
>4460		EXHAUST VENT SYS B-177 T	841132	12,879	2,254	15,113	-04		
>4461		EX-HAUST VENTILATION SYS B	850314	71,303		68,031	-02		
>4462		EX-HAUST VENTILATION SYS G	850329	28,803	3,555	37,351	-04		
>4463		EX-HAUST VENT SYS B-> 2) M	860223	75,283		75,293	-03		
>4464		5439 EKH VENT SYST H	860510	3559,283	15,597	375,568	-10		
>4465		EX-HAUST VENT SYS B-> 121 M	550219	111,003	21,105	132,905	-03		
>4466		RP2 WATER STOR. TANKS S	850236	349,014	42,127	392,234	-03		
>4467		HEATING & PRS BLDG 57 G	660123	55,553	5,723	62,273	-01		
>4472		POOF REPAIRS BLDG 94 D	841218	215,003	21,165	237,145	-05		
>4483		WINDOW RPL 3-121 D	851331	693,403	4,575	698,375	-03		
>4485		RP - CA1CC ODS ALDÖ #83 N	841215	113,964	1,235	120,222	-01		
>4486		REPLACE REPAIR DOORS N	850517	279,473	5,514-	272,253	-02		
>4491		RE2LC 3 FIRE PUMPS 3LG 21C	921231	202,244		203,918	-02		
>4501		ROOF REPL BLDG 57 V	850415	448,122	323,416	771,538	-05		
>4510		RP - DRAINAGE PUMPS 3-773 T	960115	157,703	12,125	167,725	-01		
>4511		BLDG 25 TOILET FACILITIESA	851230	154,513	5,422	162,513	-01		
>4514		PPS 3-DG 75 A	841127	279,003	33,575	313,775	-06		
>4534		DRYDOCK 465 O	830718	185,133		186,103			
>4537		233 INS SHP FWTP DEMIN H	850119	82,995	1,397	82,282	-02		
>4555		ROOF REPAIRS, BLDG. 77 U	850313	178,743	178,743	178,743			



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 30D IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

17 RUN DATE: 07/06/83

DOLLAR RANGE OF AWARD (\$000) K

JACDO:	DESCRIPTION	B07	AWARD AMOUNT	CURPRI MOD AMT	CURPRI-AWARD	LAST MOD NR#	
32982	INSTL BATTERY SHOP	C 850132	42,583	42,583			
32884	TE-EPH SYSTEM INSTAL-A	A 850533	55,474	55,474			
32941	SURETY TAKEOVER AGREEMENT	K 830230	113,457	113,457			
32947	LAWSCAPING TRIDENT PARK	L 850512	198,823	198,791	-01		
31466	ERECT 165-TON DERRICK	H 870328	3,352,503	3,513,713	-28		
31473	1ST LIVAC CRANE CHINA	L 851131	1,0,463	394,277	-36		
31705	REPL CALORIFIATORS-FT AD	H 830125	1,0,437	10,437			
31713	REPLACE FENCE	G 850772	224,641	251,468	-03		
31714	REPAIRS & ALTS BLDG 117	M 850210	59,275	56,139	-05		
31752	REVOLUTIONS - BLDG 117	P 840324	583,215	52,263	-07		
31761	RPRS T2/O/H DOORS 3 1172	M 851230	32,652	1,597	-01		
31761	NEW BRIDGE CRANE B1171	I 870417	58,357	2,297	-01		
31770	RPRS T2 FEEDER CABLE	L 840323	79,285	79,285	-01		
31731	INT & EXT PAINTING	D 840323	25,003	24,992	-02		
31783	COVTRD IMPROVEMENTS	NETCO	840321	14,822	13,577	-02	
31789	REPLACE WINDOWS MAHAN 33 C	C 860212	81,705	525	-02		
31719	EMERGENCY ALARMS BLDG 1787	C 850121	35,003	38,393	-03		
31920	B.237 PLAN VAULT ADDITION	N 860537	65,603	54,411	-03		
31923	PLATEYARD CRANE STRJC	M 831216	193,903	74,649	-03		
31927	PUMPWELL NJ. 1 ALTS	S 850222	97,725	55,403	-03		
31931	PEHAB 3ARGE BOILER	B 840416	893,025	213,215	-03		
31934	RETUSE SUPERHT BOL-ER S	U 841210	68,254	31,332	-01		
31970	RADIATION PROTECTION	J 871211	163,403	100,285	-01		
31771	CLIM SYS VAULT BLDGS 239	S 941315	12,203	1,117,363	-03		
31980	ROOF REPLACEMENTS	D 960117	145,203	5,239-	-03		
32016	FREIGHT ELEV RPLC/ 3+42	S 850433	73,303	1,123	-02		
32018	REVOKE MEN'S RESTROOM	C 850313	23,803	28,803			
32022	REPL ROOF	D 860537	125,003	3,735	-02		
32023	9.39 TEST CRIB	J 850322	29,793	2,537	-04		
32047	EGRESS/ALARM DEFICIENCIES	J 871315	43,403	4,159	-02		
32048	INSTAL-GUIDES/STRESS	H 631115	67,693	6,279	-01		
32052	REPL ROOF VAR BLDGS-	R 851210	243,422	1,123	-03		
32059	R12 RA2 REPAIR	M 841120	139,795	127,353	-04		
32279	SAYBLAST 3 PAINT CRANE	C 231211	12,595	3,575	-01		
32364	LANDSCAPE CONTRACT	G 830313	17,203	17,203			
32379	RELINE 74 BATHTUBS	P 831217	22,753	5,545	-01		
32403	INSTAL 1P-3 TRAINEE	P 841210	105,813	105,913			
32420	RPR EXTERIOR DOORS	C 861215	14,103	14,103			
32430	SWITCH GEAR	F 850514	67,923	115,373	-02		
32724	MISC EKT PAINTING	S 840517	67,562	67,662	-01		
32729	RPR - WINDOWS BLDG 1	F 850132	42,323	42,323			

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CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE BJD IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

16 RUN DATE: 37/05/98

DOLLAR RANGE OF AWARD (\$000's) \*

CD/CU	DESCRIPTION	BUD	AWARD ACCOUNT	CUMPRIM-AWARD	CURPRI	LAST MOD #
20276	RPA ROOF/DRAINS BLDG 2	E 850318	491,000	9,000	500,000	-01
20277	ALERT :JRCE BLDG ADM P	850210	377,800	377,265	377,265	-05
20278	DIVING HALL PEASE AF B	J 840514	822,763	33,554	861,532	-04
20280	ALTER SYM	S 831122	145,400	4,799	151,193	-04
20281	HOSP FIRE PROT PH II	B 841210	543,900	610,215	610,215	-03
20285	FIELD ADJUSE	J 880527	3,803,600	23,352	3,836,352	-07
20287	WATER DIST LINE	Y 850315	293,750	298,750	298,750	-01
20290	PLAYING COJETS NADC	H 841029	73,435	75,453	75,453	-02
20293	GLOSS 3 BLOCK REPLACEMENT	M 840213	135,000	3,373	138,373	-02
20294	MECHANICAL REPAIRS C	C 840210	23,375	1,979	25,755	-03
20299	ANTENNA (PAID)	M 850320	135,900	4,739	140,609	-03
20305	FAMILY SERVICES CENTER S	S 871032	669,787	13,293	683,085	-05
20309	RETRO FIT OF BLDG 7C	H 870511	772,000	11,205	790,205	-02
20351	WHOLE SITE REPAIRS T	T 861202	2,663,000	1,103,159	3,651,169	-06
20384	WR347	F 850123	79,602	78,402	78,402	-03
20392	H369A/REDUCE-NOISE-LEVEL-R	R 870823	227,000	2,0564	224,935	-02
20396	MAINT OF TAXIWAYS F	F 850224	193,353	2,364	201,997	-05
20399	MAINT OF AIRCRAFT PARKINGS S	S 841131	180,269	180,269	180,269	-03
20400	MAINT OF AIRCRAFT PARKINGS	S 841129	103,464	36,000	137,464	-03
20503	AIRCRAFT MINT. FACILTY S	S 850423	263,153	4,500	267,759	-03
20511	UEPH UPGRADE B	B 870118	24,295	24,295	24,295	-06
20515	CHILD CARE S	S 861103	1,089,000	35,507	1,124,507	-11
20515	PARKING APRON REPAIR S	S 840930	63,314	12,339	83,152	-01
20516	RECONSTRUCT RUNWAY H	H 860110	3,333,272	201,722	3,534,274	-03
20520	AMMO SURVEILLANCE FACILITY W	W 871112	3,200,000	47,211	3,247,211	-05
20523	SQADRON OPERATIONS B	B 860312	1,316,000	71,443	1,358,443	-07
20529	UEPH S	S 860422	5,531,300	293,157	5,883,467	-25
20530	REPAIRS/OVULAY TKWF R	R 850323	745,123	65,432	811,525	-03
20531	PEL 10 17 JUTTS L	L 851129	213,000	25,321	239,921	-02
20534	FAIR HS3 RPSS-FOREST P.F.I.LK	L 851107	195,783	2,310	199,093	-02
20535	HR1/2/3-S3 COM 16 M	M 851201	243,700	13,157	255,867	-01
20536	HR1/2-33 RECOM 13 N	N 860513	693,972	32,923	532,795	-02
20535	FAIR HS3 QPR-WATERLOO,IA N	N 850715	281,781	23,734	305,515	-01
20539	CATHODIC PROTECTION M	M 861039	243,300	53,194	301,794	-06
20539	ENERGY CONSERV IMP'S S	S 850321	145,010	4,729	149,739	-01
20542	REPAIR RUNWAY 17/35 M	M 870737	3,029,355	173,555	3,189,322	-04
20545	FIRE RESCUE STATION B	B 870725	1,616,000	27,100	1,643,100	-04
20606	ROOF REPAIRS HGR #1 T	T 850527	340,250	650-	339,600	-02
20609	RESERVE CTR ADMN A	A 870512	445,895	502,159	502,159	-10
20610	ATHERIZZINI/VAR 3LDGS M	M 851028	77,800	77,800	77,800	-01
20600	POWER FACTOR CORRECTION C	C 851106	35,500	35,500	35,500	-



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 300 IS PAST AND ACTUAL  
SOURCE: CMS EXTRACT FILE

15 RUN DATE: 07/05/83

DOLLAR RANGE OF AWARD (\$000) <

LDO#:	DESCRIPTION	901	AWARD AMOUNT	MOD AMT	CURPRI	CURPRI-AWARD	LAST MOD NR#
J152	REPLACE BOILER	T	8403229	125,251	14,458	140,719	-04
J160	REPLACE BLDG 2948	P	8612229	102,661	14,053	115,514	-02
J164	ELF TRANSMITTER FAC	B	860325	5,847,929	7,937	5,917,995-	-12
J177	RECRUIT PROJ BLDG	M	870430	9,151,240	33,355	8,457,595-	-26
J111	WATER POLLUTION ABATE F	F	241221	28,151	7,294,465	29,465	-03
J113	INTERG3 MATL HANDLS COMP	F	870514	13,551,000	-----	13,863,727	-25
J117	REPR REPLICA WATER SOFRNS T	T	851221	1,02,395	50,125-	96,4271	-03
J121	TRANSIT SHED	P	871229	2,13,770	75,471	2,226,241	-10
J131	MOBILE WINE ASSEMBLY FAC	G	880222	1,223,641	53,134-	1,217,307	-09
J132	CA2 SYSTEM FACILITY	M	860323	189,573	9,751	193,423	-05
J134	REPR CRANE TRUCKAGE DD 3	R	870722	1,163,503	151,307	1,321,807	-15
J140	APLC DOORS BLDG 974 H	H	850315	75,717	23,925	107,542	-04
J141	RPLQ CEILING BLDG 75-JRD E	E	940317	52,247	21,939	75,185	-04
J164	PF2 SUBSTRUCTURE PIER 2 A	A	860123	1,350,243	26,512	1,639,363	-05
J166	DIESEL ENG JP, TRAINER 3	S	850731	783,685	192,355	262,452	-15
J168	REPLAC AIR/STEAM PIPE, DDFR	S	871031	1,072,000	25,055	1,072,000	-09-2
J169	COMPRESS AIRPIPE SUPPORTD	D	870617	1,929,021	79,137	1,929,021	-05
J106	REPLACE VALVES	P	840537	83,494	-----	83,494	-09
J107	WAVS JIS 115-111 SYSTEM W	W	930320	26,460	-----	26,460	-07
J109	RR'S TO PIER #2 & #4RF R	R	870320	587,000	519,237	1,106,237	-03
J113	RPAALTER BLDG S	T	850930	376,000	33,352	407,362	-03
J117	RPAALTER BLDG S	E	850531	42,151	535-	48,555	-03
J118	REVOLATE WAREHOUSE D	D	860531	1,383,433	24,198	1,635,637	-09
J152	RPAALTER BLDG 600 G	G	850430	338,510	15,256	356,966	-04
J152	REVOLATE 2ND FL. B--#77 P	P	850323	54,645	63,912	606,558	-05
J153	SOFTBALL FIELD LIGHTS G	G	960325	125,300	398	127,298	-02
J170	ECS IN SEAR METROL 33Y S	S	860224	16,613	5,317	132,335	-06
J181	FIRE PROTECT SYS RDP TRLD	S	850328	45,000	5,510	51,510	-03
J182	DEMO 5-DG 529 YAVSTA M	M	870420	985,000	257,395	1,245,395	-10
J186	REPLC 2CH TRANSR PIER 15 S	S	851231	171,117	828	171,945	-02
J190	EVACUATION FIRE ALARM SYS W	W	851119	14,892	-----	14,892	-01
J191	RPR AUTO-HOBBOKEHOP U	U	870914	63,000	5,510	69,000	-03
J192	REPRS TRESTL SECT 11-22 P	P	850116	1,180,213	235,234	1,417,147	-08
J253	REPAIRS (PIER)-TRESTL-ES #1A	S	861223	1,229,592	13,745-	1,247,745	-08
J250	SPECIA PROJECT RC7-83 A	A	871210	1,04,000	23,250	1,077,250	-15
J269	UPGR SEC/REV/ADMIN/ENVRCD	M	861121	222,370	23,393	245,753	-09
J271	ALCM IV	M	861126	96,070	3,284	972,356	-05
J262	ALT RES FRCS OPS & TRNS S	S	850630	361,693	34,091	401,785	-03
J264	QUAWHAL REPRS S	S	561227	3,283,495	236,321	3,295,815	-13
J269	STM PLT IMPS D	D	861220	733,951	55,716-	677,237	-02
J272	RDP RRS 3-DG 1801 COO B	B	950313	413,793	7,925	127,715	-01

P4MWF-STAFF1.CNTL.



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 300 IS PAST AND ACTUA.  
SOURCE: CMS EXTRACT FILE

14	RUN DATE:	07/05/88	DOLLAR RANGE OF AWARD (\$000) *	BUD	AMOUNT	AWARD	%0 AMT	CURPRI	%0 AMT	CURPRI-AWARD	LAST MOD YR
JJH3U	24000:	DESCRIPTION									
	44506	ROOF REPAIRS BLDG 541 A	850430	745,200		73,179		819,172		-74	
	44538	RPL AIR DRYERS 3LD 22/23 H	850414	383,789				388,789		-73	
	44542	OVEPHAJL OF CRANE A-E-75 U	860416	395,323				429,392		-73	
	44550	BLDG 12374 QDOF REPAIR S	850246	405,000				460,469		-72	
	44570	MISC. EXTERIOR PAINTING 3	830417	381,733				381,739			
	44596	PEMV ASSEST REPAIR INSULAP	830530	61,862				617,862			
	44513	FOUNDATION SAND SYS BL 20M	841124	429,465				580,255		-75	
	44549	FIRE DAMAGE REPAIR M	840412	10,500				10,400		-73	
	444070	INT. REHAB. VAR. BLDGS T	840536	163,054				167,129		-72	
	44591	REPLACE AIR DRYERS 3-D 520H	860331	389,789				388,789			
	44571	INTERACTIVE GRAPHICS FLS	820728	122,500				130,200		-71	
	444925	ALT/PRS. TO DNL C-INIT B	840126	112,425				114,113		-73	
	44493	POLLUTION ABATEMENT PROJ. W	870514	126,421				135,535		-75	
	444979	ALT REPR CURBS, SIDEWALKS	821116	19,290				18,429		-74	
	44495	INSTAL. HP AIR COMPRESSORD	830323	52,985				59,485		-71	
	445156	REROOF	821112	781,262				787,977		-72	
	44564	RPR ROOF BLDG 405 S	830214	182,231				182,231		-71	
	445410	ASBESTOS REM & RPL. INSUL T	840416	71,405				71,405			
	44549	INSTLL COMBUS CONTR. SISTS	680519	37,000				439,784		-73	
	44551	REAR FAST TST AR B2-1 FLRR	821122	19,215				19,215			
	44554	BOILER RM 3 REPL BUIL #1 H	850320	425,773				465,469		-71	
	44555	RENOVATE OFF DIRECTR RATE P	860404	210,110				210,229		-73	
	445459	REPR GALLERY L	940329	105,000				154,459		-72	
	445833	CEILIN 8-LITE PAY 3-25 S	830225	26,983				27,350			
	445881	RE-LAB DISC'S LEGAL OFFICE	830117	12,553				13,319		-72	
	445685	COMPUTER PAR MONIT21-32 R	841112	19,303				22,105		-74	
	445903	REPR/ALT TO VAR. BIT. ROS C	850513	313,777				370,275		-73	
	445906	REPL HIGH PRESS STM 301LEAD	831114	1,137,523				1,180,315		-79	
	445910	RPL WOOD KNOV SASH 3-12 JH	650528	56,200				14,354		-74	
	445919	FIRE PROTECTION WATER LINK	850331	190,200				190,169		-71	
	445927	ALTEP BLDG 9 TRANS EQUIP P	850732	95,505				12,240		-76	
	445939	INSTL STEAM TRENCH COVERR	870511	55,200				53,273		-72	
	445147	SPILL CLEAN UP P	820522	12,977				12,134		-72	
	445157	LEASHTS OF VINE PAVEL VANH	850221	66,452				110,587		-75	
	445183	INSTALLING WATERMAIN TIE R	840730	93,318				97,500		-71	
	445229	REPLACE SCILERS A	841110	320,557				335,432		-74	
	445344	UTILITY LINES S	850428	52,933				79,229		-72	
	445705	VENTILATE TEST LAB 3355 D	941119	37,713				39,513		-72	
	447143	REPR RJFF DRAINS, 3-DG. 4D	870331	13,295				13,295			
	447146	NEW STRUCTURAL SLA3 RL 1 N	841128	392,311				418,793		-72	
	447238	ALTS T) FROSTHETICS LA3 P	860522	193,000				205,569			



CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 3D IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

13 RUN DATE: 07/05/93

DOLLAR RANGE OF AWARD (\$1000) <

RECDDOC	DESCRIPTION	90C	AWARD ACCOUNT	400 AMT CUMPR-AWARD	CUMPRI	LAST MOD 491
<3559	INSTAL- SMOKE DETECTORS A	840423	41,477	3,624	49,264	-21
<3551	INSTAL- SPRINKLERS A	840324	185,000	6,937	190,387	-23
<3562	RE-PLC STM CONDENSATE LINED	850731	382,500	5,320	396,300	-22
<3563	WAREHOUSE CONVNS BLDGS G	850517	775,750	32,558	815,408	-21
<3574	NAVY EXCHANGE COMPLEX A	850812	2,796,000	157,525	2,951,605	-22
<3608	FUEL OIL STRG TANK #4	841012	612,025	14,574	626,599	-24
<1450	CRAVES BLDG. 1000 A	850126	1,253,975	213,575	1,478,549	-23
<1453	TWO CRAVES FOR CHINA LAKEH	851121	3,339,365	210,741	3,549,405	-23
<1462	"A" PACKAGE H	880115	747,819	506,250	1,051,862	-21
<1462	ONE 12J TOW OET CRAVE E	860321	1,599,919	1,659,492	1,659,492	-26
<1462	CRRECT 2EF 32/10 TN JET CREF	860630	32,450	30,450	30,450	-22
<1741	CA>ACITOP BANK SUB 3 C	830330	62,173	62,173	62,173	-21
<1775	ALTS P42TO LAB BLDG 1A P	831222	197,000	15,181	213,181	-27
<1780	RPRS BJS STRUCTURES SU3 70	840326	14,950	14,950	14,950	-25
<1912	RENOVATION OF THEATER 322J	860124	140,525	11,781	152,405	-25
<1917	922B/75 TANK INSTAL-MODS B	840318	73,803	2,583	75,483	-32
<1935	U02 PARKING LOT B	820323	22,973	22,973	22,973	-21
<1943	DOOR REPAIRS 9 175/32/42 N	850123	161,524	52,528	221,052	-32
<1965	B. 16 CAD FACILITY S	850210	109,000	75,375	184,895	-28
<1973	B. 248 QPR TO CPO C-U/B J	850329	173,000	7,881	180,881	-26
<1981	B 170 OFFICE RPR/ALT S	850224	211,000	53,152	261,152	-27
<1991	CRANE RAIL RPL 3 6J S	850110	63,672	63,672	63,672	-21
<1995	RENOVS 3LDGS H-1/95 J	840929	28,950	2,427	31,377	-01
<2005	MISC E-ELECTRICAL WORK A	851121	51,013	51,013	51,013	-32
<2015	RPA LOW BAY ROOF B. 92 O	850134	285,900	5,463	292,363	-32
<2334	GUARD TOWER S	820815	22,205	22,205	22,205	-21
<2337	MAMMOL REHAB 2 C	850313	68,833	1,311-	67,513	-21
<2352	RE>VALT TO 3BLDG 12 P	840127	593,420	593,420	593,420	-21
<2353	RE-AIR STORM DRAINS P/A M	841130	445,000	171,392	617,892	-37
<2370	REAL FURNACES CAPE4RT HSJ	840221	375,312	43,223	415,312	-21
<2375	RE>ALT TO 3BLDG 2U D	860523	803,143	71,225	879,365	-25
<2420	ADDN T2 P/A RLDG 11	831231	24,372	24,372	24,372	-21
<2713	RE>AIRS/ALTS, LAB 3-1 C	840716	178,413	3,378	182,388	-32
<2753	INSULATE ATTIC 3BLDG. 633 I	830722	31,980	31,980	31,980	-21
<3412	WELD S40P, STIFFISSL AF3 P	860423	113,350	1,250	120,500	-22
<3399	RPA TIE-FLOORINGS	831030	25,000	25,000	25,000	-21
<2345	CENTRA - FIRE ALARM SYSTEMD	860526	166,759	31,030	195,839	-22
<3707	C-3 TRAINING ROOM D	821128	138,450	200	18,655	-21
<23721	RE4AB 24-E X	830323	324,313	5,715	330,223	-25
<23731	RENOVAT BLDGS C-11 & R-11A	831214	447,000	5,582	455,582	-28
<23788	ALTERATION TO BLDG C-1 P	830730	80,900	100	80,900	-22

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CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 300 IS PAST AND ACTUA-  
L SOURCE: CMS EXTRACT FILE

12 RUN DATE: 07/05/88

DOLLAR RANGE OF AWARD (\$000) K

JJ43U  
JCDUS:  
DESCRIPTION  
900  
AWARD  
ACCOUNT  
MOD AMT  
CUSPRI-AWARD  
LAST  
MOD NBR

	DESCRIPTION	900	AWARD ACCOUNT	MOD AMT	CUSPRI-AWARD	LAST MOD NBR
-2140	COVTL ROAD/FENCE A	560634	435,283	123,790	553,363	-34
-2143	UPGRADE AIRFIELD PAVEMENT	830329	2,879,272	229,253	3,108,323	-09
-2147	ELEC/E-ELECTNS SHOP 400	850223	1,880,571	89,115	1,968,783	-05
-2151	PIER STRUCT. REHAB. S	830726	263,802	157,253	433,837	-09
-2167	RPR/OP-C J/P-6 AVGAS FILTPK	850624	147,832	147,832	147,832	-02
-2183	COMCTNS ELECT TRNG FAC B	850321	1,816,002	73,363	1,892,363	-08
-2184	ADD BDG 350 ATOMNT SHP M	850327	1,113,165	61,340	1,155,205	-07
-2187	RPR BOILER B	830522	84,293	4,513	89,303	-03
-2185	RPR TO SOUTH SIDE PIER 2 S	851229	2,450,632	290,522	2,741,152	-07
-2192	IMPROVE SEWER SYSTEM N	860416	64,195	66,122	66,122	-02
-2193	CONSTR FAMILY SERVC CTR S	860230	157,002	157,202	157,202	-02
-2194	PAVE PAWS POWER LINE S	850724	938,002	7,575	945,575	-24
-2195	BOUNDARY SECURITY T	861223	572,725	572,725	578,475	-06
-2196	INTERIDE PLANTING-MARFINCT	931223	15,002	50,222	65,002	-02
-2199	PIER UTILITIES M	871125	2,452,002	175,659	2,625,659	-11
-2202	WHOLE CENTER RPR PROGRAM B	861229	847,862	124,526	972,445	-13
-2208	BLDG 6; PS 11 H	651229	1,495,802	47,152	1,447,935	-07
-2209	ALERT APRON IMPROVEMENTS S	831110	2,795,802	227,347	3,095,555	-09
-2216	RPR/ALT STEAM HEAD 3D 29N	871110	389,302	172,528	561,508	-05
-2218	PHONE OCT FOR 780 JEPH W	830320	178,202	3,250-	174,752	-01
-2225	INST DELUGE SYS A	8611229	1,784,482	87,521	1,871,381	-20
-2228	REFUEL VEHICLE MAINT. FACC	8311122	755,202	57,222	762,909	-05
-2245	VEHICLE MAINT. FACILITY S	850533	5,637,452	523,559	6,261,122	-34
-2256	MISCELL. RPRS C	880426	15,775	423	15,183	-02
-32251	ELEC-DISTY SYS IMPS F	880618	245,522	25,522	271,522	-03
-32256	REPAIR ROADS D	841125	963,283	145,537	1,103,823	-13
-32257	MAINT & REPAIR PROJECTS M	841125	325,363	79,972	405,362	-10
-62260	SLR FEED-CJD POLISER ADH	861121	565,535	42,121	607,457	-07
-22281	EVALUATION FACILITY G	870227	29,072,002	1,015,977	29,085,377	-42
-22287	IMPS T2 CLUB-BLDG #506 W	860516	295,214	595	295,913	-03
-22289	RE2 TIP DAY CARE CENTER M	840410	135,002	15,332	151,383	-03
-22292	RER FIRE SAFETY DISREPV A	860720	197,302	155,322-	41,103	-02
-22293	H154A/2SHA*5/ NOISE OPERATI	871230	36,525	9,765	43,272	-03
-22296	OPERATIONS TRNG BLDG M	830711	39,952	952	39,202	-02
-22302	RPR PU4PHELL FACILITIES U	870521	603,335	79,433	682,763	-06
-22304	RE2 TIP 3 PHASE V H	651226	775,982	55,922	833,791	-08
-22306	RPR HEATG SYS 3BL 16/13 M	851129	664,352	11,222	675,562	-03
-22307	RPR CASSIANS DDW 4 3 S D	861217	2,642,002	3,528-	2,6432,372	-02
-22309	RPR POSITION BL. #23 U	851125	583,702	43,265	627,565	-04
-22320	PROJUCPE CHILLERS+ELEC CENT	830126	269,925	269,925	269,925	-01
-22334	EXTER TRANSFORMER/PIPELINE?	830321	75,912	76,912	76,912	-01

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CONSTRUCTION CONTRACTS GREATER THAN 10K  
WHERE 3JD IS PAST AND ACTUA-  
SOURCE: CMS EXTRACT FILE

11 RUN DATE: 07/03/83

DOLLAR RANGE OF AWARD (\$000) \*

PROCDOC	DESCRIPTION	300	AWARD AMT	MOD AMT	CURPRI-AWARD	CURPRI	LAST MOD NR
314765	REPRS SINGE PLANT B-JGS.	M	820393	122,500	4,000	126,500	-21
314773	REPR H/VAC 3-3 PHS II	H	870721	765,983	172,232	936,221	-36
314776	REPAIR EXTERIOR BLDG #4	M	630226	366,300	15,447	381,747	-25
314779	REPAIR ANTEK ROOF	D	641130	555,800	153,539-	402,162	-23
314614	SNOKE DETECTOR PROTEUS D-EH	E20524	11,400	11,400	11,400	11,400	-
314549	REPL UNR/AUTO START D-R K	E20519	277,700	91,377	368,777	-34	
314550	SCDT D-OWER REPAIR C	840413	53,350	53,350	53,350	53,350	-
314350	ALT. 2/4 DIV. OFFICE R	530225	35,500	35,500	35,500	35,500	-23
314903	RPT B-475 R#473/4	P	230322	41,375	7,375	48,443	-23
314606	RPT DOOR CONTROLS G	850222	35,585	2,555	37,243	37,243	-22
314911	RFRS HV AS CONDENSATE SYSH	E30227	62,983	1,735	71,724	-21	
315023	ALTIRE, B1233 D	E20328	163,987	163,987	163,987	163,987	-
315064	MASONRY REPRS 2 OTHER EXTRE	E20329	135,000	135,000	136,200	136,200	-
315052	RPT TO FIRE PROTECTION K	530226	92,840	15,449	108,283	108,283	-22
315080	WINDOW REPAIRS ALD# 4133 P	E30211	69,200	69,200	69,200	69,200	-21
315213	CONVEYOR BRIDGE 9-2103211L	E11027	75,333	2,355	76,185	76,185	-21
315239	INTEXT MAINT PAINTING FML	E20122	15,923	15,923	16,923	16,923	-
315256	X-RAY FMN F	E20434	12,063	12,063	12,595	12,595	-21
315940	REPA-TEN RADAR PENTHE H	341119	114,900	9,099	123,993	123,993	-27
615799	VP FAC EXPANSION G	E30726	165,194	9,950	174,144	174,144	-26
315625	RPT EAST DRIVEWAY 3-0G 16	E10328	45,677	45,677	45,677	45,677	-
315922	RPT SIDING 3183 M	E40424	43,800	42,425	43,800	43,800	-23
d15931	RPT DOOR TRACKS W	351125	424,100	424,425	466,525	466,525	-
315932	CONSTRUCT SAN SEWER LIVESI	E20315	42,875	42,875	42,875	42,875	-02
d15937	REGIONS CENTER G	E850320	189,830	3,280	193,110	193,110	-23
d17130	AIR COND/ALTER TO CM N	N50531	142,979	55,550	198,479	198,479	-10
d13690	SEWAGE CONNECTION C	910436	62,000	60,000	60,000	60,000	-
322001	UPGRADE INDUSTRIAL P-VLT L	E31017	345,300	77,350	422,160	422,160	-24
322011	CONSTR HEAD MFG COMPLEX L	650121	37,200	1,220	38,000	38,000	-21
322014	RP- PC3 TRANSFORMERS D	650130	75,771	70,771	70,771	70,771	-
322030	ALT TO COMPARTMENT A 60 580	E40713	552,150	9,375	560,245	560,245	-25
322035	NAUTIJUS MEMORIAL C	E31021	5,125,000	224,568	5,347,568	5,347,568	-15
322045	APR PORTABLE WATER TANKS Z	E21225	24,593	24,593	24,593	24,593	-
322050	SOLAR MODIFICATIONS G	831128	24,555	24,555	24,555	24,555	-21
322066	HOT WATER MAINS PEASE AFDC	840115	2,500	2,745	3,292,795	3,292,795	-23
322102	ANVA 3 SWITCH GR/SUSTA M	E30436	42,400	42,400	42,400	42,400	-21
322103	RPT-HOT-ER PLANT DEAERATOR	341215	172,372	172,372	192,593	192,593	-24
322121	SIMF II S	831023	962,300	27,431	891,731	891,731	-24
322125	CRUISE MISSILE SUPPORT U	840410	2,497,994	2,497,994	2,647,573	2,647,573	-29
322129	RPT STATICX ROADS M	860725	369,413	151,575	368,419	368,419	-27
322130	QUAYWA-LS	550530	2,463,565	33,259	2,502,524	2,502,524	-27



**APPENDIX G**  
**CONSTRUCTION FIRM FAILURES**



CONTRACTS  
BY BUSINESS  
CLASSIFICATION

YEAR	GENERAL CONTRACTORS		SUB CONTRACTORS		OTHER CONTRACTORS		TOTAL CONTRACTORS	
	Number	Liability \$'000	Number	Liability \$'000	Number	Liability \$'000	Number	Liability \$'000
1947	787	5080	529	8076	34	2019	760	10275
1948	71	4712	56	1159	38	581	51	6252
1949	221	3205	698	14407	21	2103	518	5000
1950	456	29757	753	21717	57	2195	1016	39500
1951	420	38127	820	25435	61	6667	1214	37776
1952	705	54175	1020	47211	66	8238	1634	302108
1953	615	54425	1176	38486	105	8420	2106	18112
1954	672	60765	1166	41008	121	11931	2162	17576
1955	749	66078	1159	42651	156	12176	2054	172180
1956	1020	770386	1476	74177	168	16538	4507	21100
1957	705	84042	1520	76935	184	22271	2322	167115
1958	703	73890	1489	67373	242	18264	2702	143316
1959	636	140550	1067	66531	158	21741	2407	131284
1960	570	177515	1075	71761	140	19385	2328	122121
1961	1000	195601	1213	78349	176	18356	1711	120281
1962	1148	218737	1026	66181	177	15229	1510	115776
1963	667	238834	1248	71000	171	15246	2251	926881
1964	656	185541	972	58108	175	19911	1671	874653
1965	526	85728	860	58210	170	17832	1531	777717
1966	659	122713	805	82918	129	25001	1697	201601
1967	509	151179	697	51217	116	17937	1543	112697
1968	578	97812	777	61900	89	16716	1076	193320
1969	584	162507	816	108484	93	18954	1610	92875
1970	714	167120	1012	126126	153	22219	1970	505593
1971	942	461307	1242	142089	111	22919	2291	580318
1972	716	261513	812	137145	114	20376	1773	411737
1973	619	195327	761	209766	87	40198	1803	110210
1974	502	145543	601	141166	55	42875	1204	101370
1975	531	147287	667	191511	60	41520	1179	931021
1976	1371	324806	1162	100000	103	80383	2036	792166
1977	4572	450962	1807	830075	83	80383	2036	792166
1978	1877	676295	2942	598700	285	67457	2677	651731
1979	1830	585778	3004	718512	212	211245	5047	1543322
1980	2474	771307	193	268010	2878	614307	6982	1601455
1981	2788	1058450	475	170300	327	52476	7003	1713101
1982	2634	549255	449	781550	6125	503501	7102	1713051
1983	2193	1212277	396	195105	1042	775688	6735	1923811



**APPENDIX H**  
**SBA and SCORE**  
**BUSINESS ASSISTANCE**

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	SECTION
COUNSELLING	A
<b>Sometime Small Business Needs Help</b> Georgia SCORE/SBDC directory	
TRAINING	B
Small Business Administration Spring 1988 Training Schedule April-July 1988 SCORE Seminars and Workshops <b>Small Business: The World is Your Market</b>	
PUBLICATION LISTS	C
Business Development Booklets <b>Directory of Business Development Publications</b> <b>Directory of Business Development Publications</b> Order Form	
SAMPLE PUBLICATIONS	D
<b>How to Operate a Small Business Legally</b> <b>Georgia</b> Business Plan for Small Construction Firms Should You Lease or Buy Equipment? Selecting the Legal Structure for Your Firm <b>Feasibility Checklist for Starting a Small</b> <b>Business</b> Analyze Your Records to Reduce Cost Budgeting in a Small Service Firm <b>Breakeven Analysis: A Decision-Making Tool</b>	
COUNSELLING NOTES	E
Small Volume Home Building (#108) Paint and Decorating Centers (#128)	
PROCUREMENT AUTOMATED SOURCE SYSTEM (PASS)	F
PASS Information Booklet	



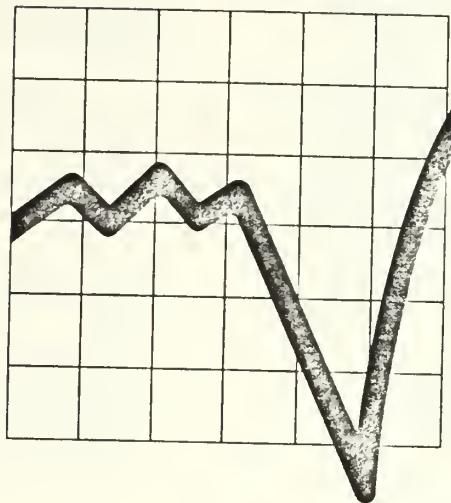
APPENDIX H

Section A

COUNSELLING



**SOMETIMES  
SMALL  
BUSINESS  
NEEDS  
HELP**



**CALL  
SCORE**



**Would you like to talk with someone who has had the same kinds of business problems you have — and who solved them successfully?**

**Would you like to talk to someone about starting a new business?**

**Would you like to get this valuable advice at absolutely no charge?**

That's what SCORE is all about. Free business counseling by men and women who have had successful business careers as company executives or owners of their own businesses.

They are willing to share their knowledge and experience at absolutely NO CHARGE.

And they are as close as your telephone. SCORE has counselors in all 50 states, Puerto Rico, Guam, the Virgin Islands and the District of Columbia.

### **EXPERIENCE YOU CAN'T BUY — BUT IT'S FREE!**

Even if you were willing to pay for management counseling, it would be difficult to find the

specialized experience to match your particular problems.

But SCORE can fill your needs. SCORE exists only to provide free information and advice on practically every business.

From ladies ready-to-wear retailing to food services and restaurants,

From construction to electronics and computer technology,

From advertising and marketing to financial control,

From purchasing to . . .

Name it and there's a SCORE counselor who talks your language

It is important to organize and manage all the special skills of a business in a way that will make the business operate successfully—

And SCORE counselors have that management ability!

### **SCORE COUNSELING — ONE PERSON OR A TEAM**

The counselor chosen to serve you has the experience that most closely parallels your needs. But no one is an expert in every type of business. So your SCORE counselor may call on other SCORE members for their special expertise.



Your counselor—or team—meets with you personally and as frequently as necessary. They analyze and define your problems. They help you find solutions. They keep checking with you to see how the solutions are functioning. The period of counseling may take as little as a week. Or a year. Whatever length of time needed.

All information learned about your business is CONFIDENTIAL. It is not revealed to anyone outside of SCORE.

## A TRADITION OF EXCELLENCE

Nationally, SCORE has helped thousands of small businesses iron out their problems. Many owe their success to the assistance received from SCORE.

Help for you is as near as your telephone. To learn how you can get personal counseling for your business, telephone or stop in at the SCORE office. There is no obligation.

Or, if you wish, you are welcome to attend any of the seminars and workshops SCORE periodically conducts. They cover major considerations for running a business. To find out when and where they are held, call SCORE.



# SCORE

Sponsored by U.S. Small Business Administration

## Service Corps of Retired Executives Active Corps of Executives (ACE)

\* \* \* \* \*

### FREE COUNSELING FOR SMALL BUSINESSES

\* \* \* \* \*

### WHAT IS SCORE?

SCORE IS THE SERVICE CORPS OF  
RETIR ED EXECUTIVES.

SCORE IS A NONPROFIT ASSOCIATION  
PROVIDING FREE BUSINESS  
COUNSELING.

SCORE IS BRAINS, IDEAS, SKILL  
AND EXPERIENCE.

SCORE IS 10,000 RETIRED AND  
ACTIVE EXECUTIVES.

SCORE IS VOLUNTEERS READY TO  
SHARE THEIR SKILLS.

SCORE IS COUNSELING ON SMALL  
BUSINESS PROBLEMS.

SCORE HAS A BACKGROUND OF  
MORE THAN 20 YEARS OF  
SUCCESSFUL COUNSELING.

SCORE'S COUNSELING SERVICES  
ARE FREE.

### Georgia SCORE Chapters

Atlanta ..... 1720 Peachtree Rd., N.W.  
Suite 600-A, North  
(404) 347-2441

Albany ..... 235 Roosevelt Avenue  
(912) 888-7007

Augusta ..... c/o Augusta SBDC, Augusta College  
1061 Katherine Street  
(404) 737-1792

Brunswick .... No Street Address  
(912) 265-0620

Columbus ..... Heritage Tower, Suite 105  
18 Ninth Street  
(404) 571-7357

Dalton ..... Dalton-Whitfield Chamber  
of Commerce  
524 Holiday Avenue  
(404) 278-7373

Gainesville .. Gainesville-Hall County  
Chamber of Commerce  
230 Sycamore Street  
(404) 532-6206

Macon ..... Middle Georgia Area Planning  
and Development Commission  
600 Grand Building  
(912) 744-6160

Savannah .... Federal Bldg., Suite 8-B  
125 Bull Street  
(912) 944-4335

Statesboro ... Federal Building, Rm. 225  
52 North Main Street  
(912) 489-8719

(over)



Georgia SBDC Directory



A University System of Georgia Program

**Do you know what the  
SMALL  
BUSINESS  
DEVELOPMENT  
CENTER  
can offer you?**

Georgia's 16 Small Business Development Centers offer free counseling to our state's small businesses. Established in 1977, the SBDC was designed to help you, the small business person.

We can provide you with information linking you with other businesses, industry and government.

Our counselors can provide you with information on:

- financial planning
- cash flow projections
- bookkeeping techniques
- sales techniques
- display and advertising
- marketing evaluation
- risk management
- organization structure
- inventory control
- employees & customers
- theft
- refinancing
- exporting
- starting a business

SBDCs are in partnership with the U.S. Small Business Administration.

(over)

Albany (912) 439-7232  
Albany Area Chamber of Commerce  
501 N. Slaphey Boulevard

Athens (404) 542-7436  
University of Georgia, Chicopee Complex  
1180 East Broad Street

Atlanta (404) 651-3550  
Georgia State University  
1 Park Place South, Suite 1055

Augusta (404) 737-1790  
Augusta College, 1061 Katherine Street

Brunswick (912) 264-7343  
Brunswick Junior College, Altama at Fourth

Columbus (404) 571-7433  
Heritage Tower, 18 Ninth St., Suite 105

Dublin (912) 272-5546  
Dublin-Laurens County Chamber of Commerce  
1009 Bellevue Avenue

Gainesville (404) 536-7984  
Georgia Mountains Center  
1010 Ridge Road

Lawrenceville (404) 963-4902  
Gwinnett Technical School  
1250 Atkinson Road

Macon (912) 741-8023  
Greater Macon Chamber of Commerce

Marietta (404) 423-6450  
Kennesaw College

Milledgeville (912) 453-9311  
Milledgeville-Baldwin Co. Chamber of Commerce  
130 South Jefferson Street

Morrow (404) 961-3440  
Clayton State College

Rome (404) 295-6326  
Floyd Junior College

Savannah (912) 651-2533  
12 West 43rd Street

Statesboro (912) 681-5194  
Georgia Southern College

Valdosta (912) 247-8100  
Lowndes County Chamber of Commerce  
1604 N. Ashley

Warner Robins (912) 922-8585  
Warner Robins Chamber of Commerce  
1420 Main Street



**APPENDIX H**

**Section B**

**TRAINING**



SMALL BUSINESS ADMINISTRATION TRAINING SCHEDULE, SPRING QUARTER 1988

This is a schedule of small business training programs co-sponsored by the U.S. Small Business Administration. The program details are subject to change. Call to confirm listed information.

SCORE  
1720 Peachtree Road, NW  
Suite 600  
Atlanta, Georgia  
347-2442

PRE-BUSINESS WORKSHOPS-8:30AM-4:00PM (\$10.00 each)  
Tuesday, May 10, 1988 (Rm 162)  
Tuesday, June 14, 1988 (Rm 197-199)  
(Free Parking for above workshops, compliments of the Beer Mug across the street)

SEMINARS - 7:00 - 9:30 PM (\$7.00 each)  
(Rm 197-199)  
MARKETING-A STRAIGHT FORWARD APPROACH

YOUR BUSINESS TAX PLANNING  
MONEY SOURCES FOR SMALL BUSINESS  
Monday, Apr. 25, 1988  
START-UP PLANS FOR SMALL BUSINESS  
Monday, Apr. 23, 1988  
INTRODUCTION TO COMPUTERS IN BUSINESS  
Monday, June 27, 1988

(Free parking at night at 1720 Peachtree Street. Please enter building 1st floor rear, double glass doors. You may also park across the street, compliments of the Beer Mug).

HOW TO APPLY FOR AN SBA LOAN-9:30-11:30AM (\$5.00 each)

Friday, May 6, 1988 - Room 197-199  
Friday, June 10, 1988 - 197-199

(Free parking, compliments of the Beer Mug across the street).

PLEASE NOTE: All courses provide special information for Veterans, Vietnam-Era Veterans and Handicapped Veterans. Facilities are available for the handicapped.

SBA MINORITY SMALL BUSINESS  
8(a) PROGRAM  
1720 Peachtree Road., NW  
North Tower 600-0  
Atlanta, Georgia  
347-7061

REQUIREMENTS AND OBJECTIVES OF 8(a)-2:00-3:00PM  
(FREE) Wednesdays

Apr. 6, 13, 20, & 27, 1988  
May 4, 11, 18, & 25, 1988  
June 1, 8, 15, 22 & 29, 1988  
July 6, 13, 20, & 27, 1988.

EMORY UNIVERSITY  
Atlanta, Georgia  
727-6000  
Steve Stoffle

STARTING AND MANAGING A SUCCESSFUL BUSINESS  
(\$55) (For Six Weeks)  
Wednesday, April 13, 1987, 7:30 - 9:30  
HOW TO START AND MANAGE A SUCCESSFUL BUSINESS (\$55.00)  
Wednesdays, June 22-July 27, 1987, 7:30-9:30 p.m.

MIOTOWN YWCA  
805 Peachtree Street at 5th  
Street  
Atlanta, Georgia  
892-3476

HOW TO GET AN SBA LOAN (\$5.00)  
Tuesday, May 24, 1988, 5:30-7:30 PM

HOW TO FORM A BUSINESS PLAN (\$15)  
Tuesday, May 3, 1988, 5:30-7:00 PM  
BASIC ACCOUNTING (\$25)  
Wednesday, May 18 & 25, 1988, 5:30-8:30 PM  
HOW'S YOUR FINANCIAL HEALTH (\$10)  
Tuesday, April 26, 1988, 5:30-7:30 PM  
Tuesday, May 10, 1988, 5:30-7:30 PM  
PROFESSIONAL SELLING '\$15)  
Tuesday, May 31, 1988, 5:30-7:00 PM  
INTRODUCTION TO LOTUS 1-2-3 \$100)  
Saturday, April 30, 1988, 7:00 AM-5:00PM  
INTRODUCTION TO DBASE III + '\$100)  
Wednesday, May 25, 1988, 7:00 AM-4:00 PM



CLAYTON STATE COLLEGE/SBDC  
Morrow, Georgia  
961-3440  
Jim Halloran

HOW TO START A SUCCESSFUL BUSINESS (8-part)  
(\$50.00) Eight-part series each Tuesday from  
7:00 P.M. - 9:00 P. M. starting April 5 through May 24,  
1988.  
BOOKKEEPING FOR SMALL BUSINESS (\$20.00)  
Tues./Thurs. April 19, 21, 1988 6:30 PM-9:30PM  
HOW TO START A NEW BUSINESS (\$20.00)  
Thurs. April 14, 1988, 6:30 PM-9:30PM (Fayette Co.)  
HOW TO START A NEW BUSINESS (\$30.00)  
Sat. April 16, 1988 9:30AM-4:30PM  
Sat. May 21, 1988, 9:30AM-4:30PM.  
SMALL BUSINESS INSURANCE '\$20.00)  
Wed. April 20, 1988, 6:30PM-9:30PM  
SMALL BUSINESS TAX WORKSHOP (\$20.00)  
Thurs. April 21, 1988, 8:30AM-4:30PM  
PREPARING LOAN PROPOSALS (\$20.00)  
Mon. April 25, 1988, 6:30PM-9:30PM  
MAIL ORDER (\$20.00)  
Thurs., April 28, 1988, 6:30PM-9:30PM  
PERSONAL FINANCIAL PLANNING FOR THE SMALL  
BUSINESS OWNER (\$20.00)  
TELE-MARKETING SALES (\$20.00)  
Thurs. May 12, 1988 6:30PM-9:30PM  
INTERNATIONAL SMALL BUSINESS (\$20.00)  
Tues. May 24, 1988, 6:30PM-9:30PM  
LEGAL ASPECTS OF DOING BUSINESS (\$20.00)  
Thurs. May 26, 1988, 6:30PM-9:30PM.

GEORGIA STATE/SBDC  
Urban Life Center  
Atlanta, GA  
Peter Rassel  
651-3550

GRASP COURSE II  
DEVELOPING YOUR BUSINESS PLAN (\$450.00)  
10 Saturdays, Feb. 6, 13, 20, 27, 1988  
Mar. 5, 12, 19, 26, 1988, Apr. 16, 23, 1988

GEORGIA STATE/SBDC  
Urban Life Center  
Atlanta, GA  
Peter Rassel

HOW TO OPEN YOUR OWN RESTAURANT (\$95.00)  
Preregister by Apr. 25, 1988  
6:30PM-9:30PM, Apr. 25, 1988, Saturday,  
April 30, 1988, 9:00AM to 5:00PM

NORTH GEORGIA REGIONAL SBDC  
GAINESVILLE AREA OFFICE  
1010 Ridge Road  
Gainesville, Georgia 30501  
404-536-7984

HOW TO START AND MANAGE A BUSINESS (\$15.00)  
Tuesday, May 10, 1988  
7:00-9:30PM

AT: BRENAU COLLEGE  
404-536-7984

TELEPHONE ETIQUETTE AND CHOOSING PHONE  
SYSTEMS TO GROW WITH A BUSINESS (\$25.00)  
Thursday, April 14, 1988  
6:30-9:00PM

AT: NORTH GEORGIA TECH  
404-536-7984

FUTURE ENTREPRENEUR'S DAY (\$25.00 for public;  
no charge for North Georgia Tech students)  
Tuesday, April 26, 1988  
8:30 AM-3:00PM

AT: BRENAU COLLEGE  
404-536-7984

HOW TO PREVENT SHOPLIFTING, AVOID BAD  
CHECKS & CREDIT CARD FRAUD (\$25.00)  
Tuesday, May 10, 1988  
6:30-9:00PM

AT: GAINESVILLE AREA OFFICE  
1010 Ridge Road  
Gainesville, Georgia  
404-536-7984

HOW TO START AND MANAGE A BUSINESS (\$15.00)  
Tuesday, May 10, 1988  
7:00-9:30PM

AT: LANIER TECH  
(404)536-7984

FUTURE ENTREPRENEUR'S WORKSHOP (\$25.00) for public; (no  
charge for Lanier Tech students)  
Thursday, May 12, 1988  
6:30-9:30PM



GEORGIA VETERANS LEADERSHIP  
PROGRAM-VIETNAM VETERANS  
(Direct Loan Program)  
AT: PRESIDENTIAL HOTEL  
4001 Presidential Pkwy.  
at I-85 and I-285  
off Chamblee-Tucker Road  
Atlanta, GA  
Andy Farris 393-1708  
Ron Miller 565-8444

IBM CORPORATION

(To be announced)

SOUTHERN BELL  
AT: Radisson Hotel Atlanta  
Courtland Street and  
International Boulevard  
Atlanta, Georgia  
1-800-331-9046

MORRIS BROWN COLLEGE  
643 M. L. K. Jr. Drive  
Atlanta, GA 30314  
MAKE RESERVATIONS  
CALL 525-7831  
Ext. 157, 159, 235

"SBA APPLICATION WORKSHOP"  
Saturday, June 11, 1988  
8:00AM to 4:30 PM  
Registration: \$25.00  
Lunch: \$9.50

SMALL BUSINESS PLANNING TODAY FOR A PROFITABLE

TOMORROW (\$85)  
Week of June 20th, 7:30AM-5:30PM (Day to be announced)

SMALL BUSINESS: INCREASE PROFITS THROUGH MARKETING (\$99)  
(Veterans \$49)

Thursday, June 9, and Friday, June 10, 1988, 9:30AM-7:00PM

WORKSHOP ON SMALL AND MINORITY BUSINESS (\$10.00 both days)  
Wed., Apr. 27, 1988, 1:00-5:00PM (for prospective owners)  
Thurs., Apr. 28, 1988, 1:00-5:00PM (for business owners)



**APRIL - JULY 1988**  
**SCORE - SBA**  
**SMALL BUSINESS**  
**SEMINARS - WORKSHOPS**

**MANAGEMENT ASSISTANCE  
FOR THE SMALL BUSINESS**

**PRE-BUSINESS WORKSHOPS**  
**8:30 A.M. to 4:00 P.M.**  
**Tuesday, Apr. 12, 1988**  
**Tuesday, May 10, 1988**  
**Tuesday, June 14, 1988**

**SEMINARS**  
**7:00 P.M. to 9:30 P.M.**

**MONEY SOURCES FOR SMALL BUSINESS**  
**Monday, Apr. 25, 1988**

**START-UP PLANS FOR SMALL BUSINESS**  
**Monday, May 23, 1988**

**INTRODUCTION TO COMPUTERS IN BUSINESS**  
**Monday, June 27, 1988**

**LOCATION**  
**1720 Peachtree Road, N.W.**  
**Room 197-199**  
**Atlanta, Georgia 30309**

**DAYTIME** - Free parking compliments of The Beer Mug Restaurant, 1705 Peachtree Rd., NW. Across street from 1720 Peachtree Rd.

**EVENING** - Free parking at 1720 Peachtree Road. enter building through rear double doors.

All programs provide special information for Veterans, Vietnam-Era Veterans and Handicapped Veterans. Facilities available for the handicapped.

**Presented by**  
**SCORE**

**SERVICE CORPS OF RETIRED EXECUTIVES**

**Co-Sponsored by**  
**U.S. Small Business Administration**

**HOW TO APPLY FOR AN  
SBA GUARANTEED LOAN**

**Regulations Procedures - Criteria**

**(\$5.00 - Pay at the door)**

**SEMINARS - 9:30 - 11:30 AM**

**FRIDAY - APRIL 8, 1988**

**FRIDAY - MAY 6, 1988**

**FRIDAY - JUNE 10, 1988**

**LOCATION**

**1720 Peachtree Road, NW**

**Room 197**

**Atlanta, Georgia 30309**

**(404) 347-2442**

**YOUR BUSINESS TAX PLANNING**

**Tuesday, April 5, 1988 9:00-12:00 AM**  
**(\$7.00 - Pay at the door) Room 162**

Special tax situations will be discussed to assist your tax filing requirements.

**ABOUT SCORE**

The Service Corps of Retired Executives (SCORE) is a national volunteer group of 12,000 men and women who have successfully completed their own active business careers and who now offer their help to both going and prospective small businesses. SCORE volunteers appreciate the contribution that small business is making to American free enterprise. They offer their talents and experience to those who need help.

Atlanta SCORE Chapter 48 has a membership of men and women who counsel several hundred clients each year at no charge. Attendance at 'going into business' workshops and evening seminars on specific business topics numbers over 1,000 participants annually.

Individual counseling sessions are available with SCORE counselors. We recommend that you follow up your participation in the workshops and seminars by discussing your own plans in detail with a counselor. There is no charge. Counselors are available at 1720 Peachtree Rd., N.W. Suite 600A Mondays through Fridays from 10:00 A.M. to 4:00 P.M. No appointment is necessary. You may call (404) 347-2442 for more details.



## **PRE-BUSINESS WORKSHOPS**

**8:30 A.M. to 4:00 P.M.**

**TUESDAY, APRIL 12, 1988, Rm. 162**

**TUESDAY, MAY 10, 1988, Rm. 197-99**

**TUESDAY, JUNE 14, 1988, Rm. 162**

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### **AGENDA**

#### **INTRODUCTION**

Financial Factors and  
Sources of Capital  
Marketing

#### **LUNCH (On Your Own)**

Forms of Business Organization  
Business Records – Regulations,  
Taxes and Insurance

#### **ADJOURN**

The inherent uncertainty of the future makes it imperative that management use all information and every technique that can be of assistance in making decisions affecting future operations. The business owner/manager needs to acquire and continually upgrade his or her knowledge and skills so that he will have the best chance of success in today's highly competitive business world.

This course will provide the opportunity for the potential or newly self-employed business person to gain or increase expertise in managing his or her own business.

Experienced management executive specialists will conduct the sessions in each management area

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### **PROGRAM OBJECTIVES**

1. To make the small business owner/manager aware of up-to-date ideas which will improve the effectiveness of his or her business operations.
2. To give practical techniques which will aid him or her in improving these ideas.
3. To prepare him or her to cope successfully with the many changes in the future economic environment.

## **SEMINARS**

**7:00 P.M. to 9:30 P.M.**

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### **MONDAY EVENING, APRIL 25, 1988**

#### **FINDING MONEY SOURCES FOR YOUR SMALL BUSINESS**

Never enough money! You need capital to buy inventory, pay employees, pay taxes, meet operating expenses, and so forth. Do you understand the various sources of money available to you? How about capital generated internally? Capital available from trade creditors? Borrowed money? Sale of ownership interest? Do you know which source is best suited to the needs of your business? A financial plan will give you time to secure capital on the best possible terms before a crisis forces you into an emergency cash shortage.

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### **MONDAY EVENING, MAY 23, 1988**

#### **START-UP PLANS FOR A SMALL BUSINESS**

Starting a small business requires advance planning and a review of principles of successful management. Start-up capital and other financial requirements are key considerations. Commercial space needed, record keeping systems, business licenses, tax and legal requirements, credit policies, and market analysis are a few of the matters to be considered at this seminar.

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### **MONDAY EVENING, JUNE 27, 1988**

#### **INTRODUCTION TO COMPUTERS IN BUSINESS**

A computer and accounting professional with over 15 years experience in mainframe computers, mini-computers and microcomputers will discuss microcomputers in small businesses. The discussion will be oriented towards potential business microcomputer buyers and recent purchasers. Topics will include potential applications, the benefits to expect from a computer system, how to decide whether you need a computer, peripheral equipment, the computer purchasing decision, and the dollar and non-dollar costs of owning and using a business microcomputer system.



# **Small Business: The World Is Your Market**

U.S. Small Business Administration

1720 Peachtree Rd., N.W.

Suite 600

Atlanta, GA 30309

Official Business

Penalty for Private Use, \$300

ATLANTA, GEORGIA

MARCH 24-25, 1983



Bulk Rate  
Postage and Fees Paid  
U.S. Small Business Administration  
Permit No. G-82





NATIONAL SPONSORS  
U.S. SMALL BUSINESS ADMINISTRATION  
AT&T

NATIONAL SUPPORTING ORGANIZATIONS  
The Service Corps of Retired Executives (SCORE)  
The U.S. Chamber of Commerce  
The National Federation of Independent Businesses  
The Burlington Northern Company  
Health Industry Manufacturing Association

Dear Small Business Executive:

There is an urgent need to transfer the spirit of entrepreneurship into the global marketplace. Small business exporters hold the key to significantly reducing America's trade deficit. Participation by small business in new international markets will mean prosperity to thousands of small business owners and work for many Americans. Every one billion dollars in exports creates over 25,000 jobs. In response to these compelling facts, the Small Business Administration (SBA) has made promotion of exporting a top priority. AT&T recognizes the importance of small business in ensuring the continued growth and expansion of the American economy and is committed to supporting the SBA's export promotion efforts. In cooperation with AT&T, SBA has developed a series of trade forums to inform small business owners of the challenges and opportunities of trading outside our borders.

We hope that you will attend the International Trade Forum to learn how exports can increase your profits and why for *Small Business: The World Is Your Market.*

REGIONAL SPONSORS  
AT&T, Southern Regional Office, Atlanta, Ga  
SCORE Chapter #48, Atlanta, GA

We particularly thank the Georgia District of the U.S. & Foreign Commercial Service, the Georgia Department of Industry & Trade, the Atlanta Chamber of Commerce, SCORE Chapter #48 of Atlanta, the International Trade Development Center of the University of Georgia's Small Business Development Center, and SBA's Atlanta District Office for their assistance in the planning, execution and delivery of this conference.

#### HOTEL ACCOMMODATIONS:

Contact the Radisson Hotel Atlanta at (404) 659-6500. Be sure to mention the SBA-AT&T conference to obtain a special rate of \$85/night.

REGISTRATION INFORMATION:  
Space is limited! Register early! Preregistration is \$85. On-site registration is \$99.

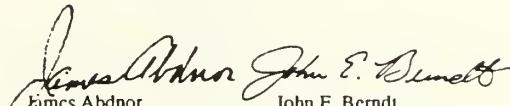
For more information contact your nearest SBA office or call  
(404) 347-4948

Complete the "Registration Form" and "Course Pre-Selection" card. Return these with your check to:

"The World Is Your Market"  
1720 Peachtree Rd. N.W.  
Suite 600  
Atlanta, GA 30309

Make checks payable to "SCORE Chapter 48". (No refunds will be issued after March 17.)

HANDICAPPED: Special arrangements will be made upon request.



James Abdnor      John E. Berndt  
Administrator      Senior Vice President  
U.S. Small Business      AT&T International  
Administration      Division



-----AGENDA - THURSDAY, MARCH 24-----

7:30 AM - Registration  
7:45 AM - 8:30 AM Coffee & Continental Breakfast  
8:30 AM - 9:20 AM Welcoming & Opening Session

"The World Is Your Market"  
James Abdnor, Administrator,  
U.S. Small Business Administration

9:30 AM - 10:30 AM Series I Courses  
10:45 AM - 11:45 AM Series II Courses  
12 NOON - 1:00 PM Luncheon

"The World of Exporting"  
Judith Sans, President  
Judith Sans International

1:00 PM - 2:00 PM Series III Courses  
2:15 PM - 3:15 PM Series IV Courses  
3:30 PM - 4:30 PM Series V Courses  
4:30 PM - 6:30 PM Reception And Exhibits\*

-----AGENDA - FRIDAY, MARCH 25-----

7:30 AM - 8:30 AM Registration  
8:30 AM - 9:30 AM Series VI Courses  
9:45 AM - 10:45 AM Series VII Courses  
11:00 AM - 12 NOON Series VIII Courses  
12:15 PM - 1:15 PM Series IX Courses  
1:15 PM - 2:45 PM Luncheon & Panel Session

"Successful Exporters"  
Moderator: George Trabue, President  
Eastman Chemical Products, Kingsport, TN

Panelists:

Cliff Hilburn, President  
Hilburn Custom Marine  
Tunnelhill, GA

Ralph Howard, President  
Kleentex, Inc.  
LaGrange, GA

Robert J. Broadwater, Senior Vice President(Retired)

Coca-Cola  
Atlanta, GA

Michael Jones, President  
HMA International  
Business Development, Ltd.  
Greensboro, N.C.

\*Exhibits open from 12 Noon Thursday-4:30 PM Friday

THE CORE CURRICULUM

- A. "WHO CAN HELP?" - SOURCES OF EXPORT ASSISTANCE  
P. Douglas Wexler, Associate, International Trade Consultants, Inc., Atlanta, GA
- B. "DIFFERENT STROKES..." - CULTURAL ASPECTS OF INTERNATIONAL TRADING  
Gordon Harrison, President, World Technology Center, Marietta, GA  
Pamela Mobley, Cross Cultural Manager, World Technology Center, Marietta, GA
- C. "WHERE IN THE WORLD?" - PERSPECTIVE ON THE WORLD MARKET  
Carlos Martel, President, The Multisource Group Inc., Atlanta, GA
- D. DISTRIBUTION: FINDING BUYERS, AGENTS & DISTRIBUTORS  
Scou Seydel, President, The Seydel Companies, Atlanta, GA
- E. INTERNATIONAL TELECOMMUNICATIONS: ITS IMPLICATIONS FOR SMALL BUSINESS  
Brenda Pruet, Seminar Leader, Communications Planning Center - AT&T, San Francisco, CA
- F. DISTRIBUTION: EXPORT MANAGEMENT & TRADING COMPANIES  
Eric Joiner, Vice President-Marketing, AJC International Inc., Atlanta, GA
- G. LEGAL ASPECTS OF INTERNATIONAL TRADE  
William C. Poole, Chamberlain, Hrdlicka, White, Johnson & Williams, Attorneys-at-Law, Atlanta, GA
- H. ANSWERING INQUIRIES: PRICING & THE PRO-FORMA INVOICE  
Treg S. Brown, Manager, Ernst & Whitney, Atlanta, GA  
Essie Stewart, Air, Land, Ocean International Services, Atlanta, GA
- I. MINIMIZING FOREIGN PAYMENT RISKS  
William S. Edwards, Vice President, First Wachovia Corporate Services, Atlanta, GA



## SPECIAL INTEREST CURRICULUM

- J. TRADE SHOWS & TRADE MISSIONS = SALES SUCCESS  
Mark Henricks, Henricks Technologies Inc., Atlanta, GA,  
Frank Scheidler, Area Manager, Neptune International,  
Atlanta, GA
- K. JOINT-VENTURES & LICENSING OVERSEAS  
John E. Yates, Esq., Corporate/Technology Group, Morris,  
Manning & Martin, Attorneys-at-Law, Atlanta, GA
- L. FOCUSING ON INTERNATIONAL MARKETS:  
ADVERTISING OVERSEAS  
Hugh Hyde, Jr., Vice President, Johnston International  
Publishing Corp., New York City, NY
- M. EXPORT LICENSING: COPING WITH THE RED TAPE  
Luba Czura, Corporate/Technology Group, Morris Manning, &  
Martin, Attorneys at Law, Atlanta, GA
- N. TRADEMARKS, PATENTS AND COPYRIGHTS  
OVERSEAS  
Henry W. Jones, III, Corporate/Technology Group, Morris,  
Manning & Martin, Attorneys-at-Law, Atlanta, GA
- O. EXPORT MARKETING: THE U.S. & FOREIGN  
COMMERCIAL SERVICE  
George Norton, Director, U.S. & Foreign Commercial Service,  
Atlanta, Ga
- P. REDUCING RISKS AND FACILITATING FINANCING:  
REVIEW OF EXPORT/IMPORT BANK AND F.C.I.A.  
SERVICES  
Gail Wilson, Assistant Vice President, The Frank B. Hall  
Company of Georgia, Atlanta, Ga  
Gerald D. Solomon, Senior Marketing Manager, Export-Import  
Bank of the United States, Washington, D.C.
- Q. SOURCES OF EXPORT WORKING CAPITAL  
William C. Cummins, Vice President-Trade Finance,  
SouthTrust Bank of Alabama, Birmingham, AL  
Marie Glover, Loan Officer, Finance Division, SBA District  
Office - Atlanta, GA
- R. TAX ADVANTAGES OF EXPORT: THE FOREIGN SALES  
CORPORATION  
John Thornton, Vice President, Global Trade Associates Inc.,  
Boston, MA
- S. SELLING ABROAD IN FOREIGN CURRENCIES  
T. Edgar Vance, Regional International Trade Representative,  
SCORE, Kingsport, TN
- T. THE EXPORT INSTRUMENT: THE LETTER OF CREDIT  
Graham Marin, Manager-International Division, Barnett Bank  
of Jacksonville, FL
- U. ROUNDTABLE: EXCHANGE OF VIEWS ON TRADE  
TOPICS  
Tom Watson, Industry Sector Advisory Committee on Small &  
Minority Business for Trade Policy Matters  
Carol Merck, SBA National Advisory Council  
Duane Hunter, SBA Atlanta Regional Advisory Council  
Fred Kress, Georgia District Export Council

## WORLD MARKET CURRICULUM

- V. TRADING WITH JAPAN  
Shusaku Hirano, Executive Director, Japanese  
External Trade Organization (JETRO), Atlanta, GA
- W. WORLD MARKETS FOR FOREST PRODUCTS  
Tom Hammet, Forest Products Specialist,  
International Trade Center, Athens, GA  
Don Jefferson, International Sales Manager,  
T&F Hardwood, Inc. Milledgeville, GA  
Rhett Willis, President, Construction Exports, Inc.,  
Savannah, GA
- X. WORLD MARKETS FOR SOFTWARE  
Don Nay, Trade Specialist, U.S. & Foreign  
Commercial Service, Atlanta, GA  
Charles Van Winkle, V.P.-Sales & Marketing, The  
Brill Corporation, Norcross, GA
- Y. TRADING WITH THE REPUBLIC OF KOREA  
Sung Ho Cho, Executive Director, Korean Trade  
Promotion Center, New York, N.Y.
- Z. TRADING WITH TAIWAN  
Tony Lee, Deputy Director, China External Trade  
Development Corporation (CETDC) New York,  
NY
- AA. WORLD MARKETS FOR MEDICAL PRODUCTS  
Michael Jones, President, HMA International  
Business Development Ltd., Greensboro, NC
- BB. WORLD MARKETS FOR INDUSTRIAL  
CHEMICALS, FIBERS & PLASTICS  
George Trabue, President, Eastman Chemical  
Products, Kingsport, TN
- CC. TRADING WITH THE UNITED KINGDOM  
Michael Jones, President, HMA International  
Business Development Ltd., Greensboro, NC



APPENDIX H

Section C

PUBLICATION LISTS

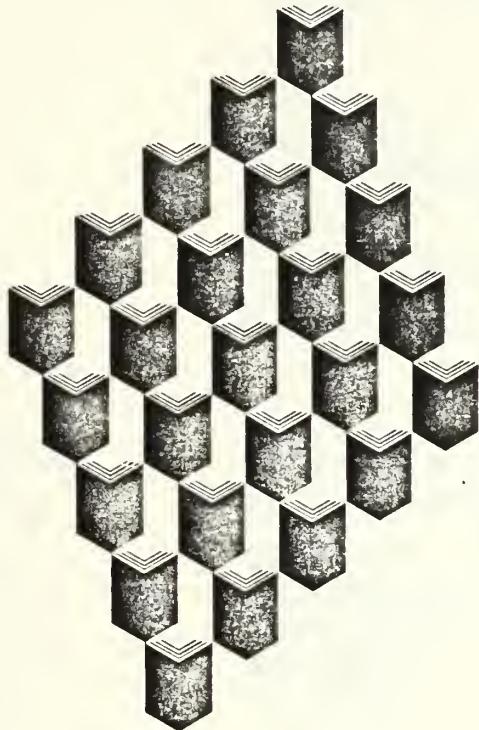


**U.S. Small Business Administration**  
Office of Business Development  
SBA 115B

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**SBA**      **Business**  
**Development**  
**Booklets**

Available at:  
Government Book Store  
275 Peachtree St., N.E.  
Atlanta, Ga. 30303  
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## Business Development Booklets

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Provides a path from idea to marketing plan for the small manufacturing or R & D firm
- 41. **Purchasing Management and Inventory Control for Small Business**
- 42. **Managing the Small Service Firm for Growth and Profit**
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- 44. **Financial Management: How to Make a Go of Your Business**

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This series is designed to help the small entrepreneur "to look before leaping" into a business.

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Continued on Back Panel



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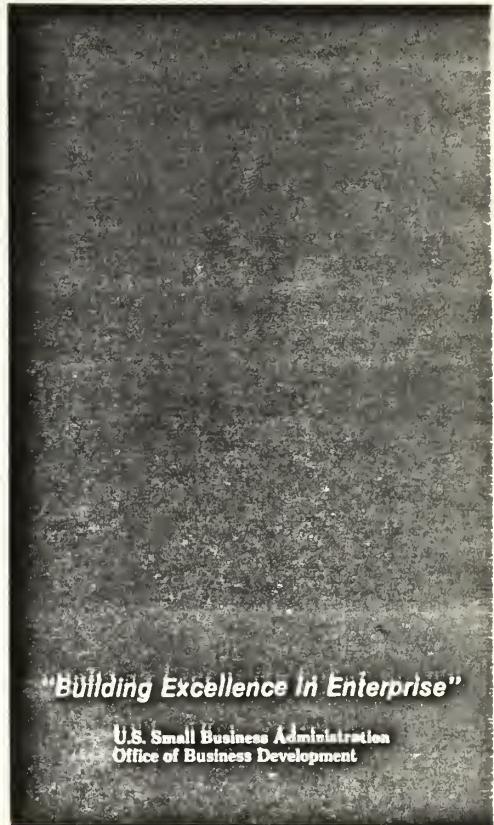
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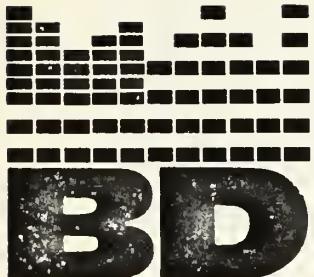
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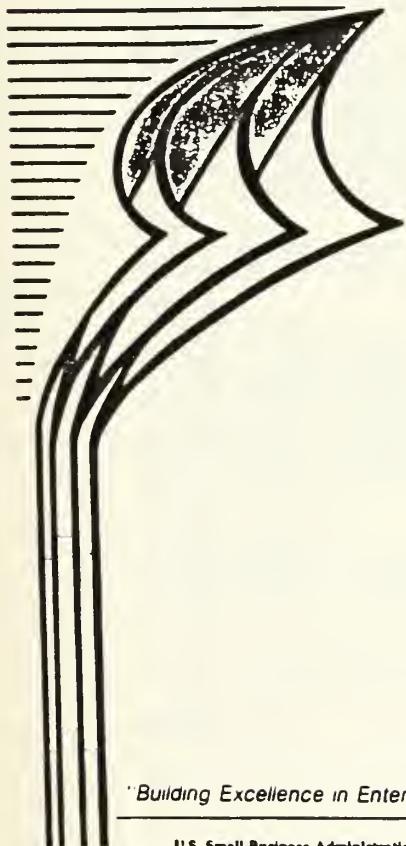
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APPENDIX H

Section D

SAMPLE PUBLICATIONS





THE MAGAZINE JANUARY 25, 1988

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**SBA**

U.S. Small Business Administration

# How to operate a business legally in Georgia

**A**lmost everyone who starts a new business is aware that a business license is necessary to operate in Georgia, but what other legal requirements does the state and federal government have? What does the owner need to know about withholding tax, building occupancy permits and sales and use tax?

Finding out this information can be difficult, since it means talking to several different agencies at the federal, state and local levels. This information is not all-inclusive and should not be considered a substitute for legal assistance from a qualified attorney. Also, since the requirements are subject to change, prospective businesspeople should contact the individual departments for the latest information.

Probably the best place to start in assimilating all this information is with the business license. Everyone is generally aware of the need for one, but not everyone knows where to get it. If located within an incorporated city limit, a license must be obtained from the city; if outside the city limits, then from the county.

#### Business Licenses:

City of Atlanta — 658-6323  
City of Decatur — 377-9911  
City of Jonesboro — 478-7407  
City of Lawrenceville — 963-2414  
City of Marietta — 429-4281  
Clayton County — 477-3565  
Cobb County — 426-3611  
DeKalb County — 371-2461  
Fulton County — 572-3226  
Gwinnett County — 995-6480

Also, those who are planning to occupy a new building or use an existing one for a new business, may have to apply for a Certificate of Occupancy from the appropriate city or county zoning department.

#### Planning and Zoning Departments:

City of Atlanta — 658-6336  
Clayton County — 477-3678  
Cobb County — 429-7000  
DeKalb County — 371-2155  
Fulton County — 586-4930  
Gwinnett County — 995-2600

Businesses involved in food processing or

grocery sales need a food sales establishment license from the Georgia Department of Agriculture before starting. An inspection is also required and may be requested by phone. An application for business will be accepted if the inspection shows that the establishment meets the department's requirements. Help can be obtained from the Department of Agriculture in preparing for the inspection. It is advised that business owners contact the department before investing in any renovation, equipment or plans. For information, contact: Georgia Department of Agriculture, Consumer Protection Division, Field Forces Office, Agriculture Building, Room 648, Atlanta, Ga. 30334: 656-3627.

Firms engaged in cooking or preparation of food to be served, including restaurants, hotels and nursing homes, are licensed by the county environmental health departments.

#### Environmental Health Departments:

Clayton County — 477-8445  
Cobb County — 423-4803  
DeKalb County — 292-1979  
Fulton County — 572-2255  
Gwinnett County — 963-5132

Categories of business that concern the public interest also are subject to special permits, licensing and inspection. This includes schools, nurseries, motor transport, public entertainment, employment agencies, securities dealers and financial institutions. Contact the State of Georgia Information Line at 656-2000 for the number of the correct agency.

Businesses which sell alcoholic beverages must have a state alcoholic beverage license and a local license which is obtained from either the city or county in which the store is located. The application forms for the licenses must be completed before the business is opened. Local authorities and the Department of Revenue can be of assistance in preparing the application. For information and application forms from the state contact: Department of Revenue, Alcohol and Tobacco Unit, 801 Trinity-Washington Building, Atlanta, Ga. 30334: 656-4260.

Taxes cannot be ignored, of course. Business owners are required by law to withhold the following from the wages paid to employees: federal income taxes, state income taxes and FICA (Social Security) insurance.

Income taxes will also be levied by the federal and state governments on earnings of any business. Therefore, each business must file an income tax return with both agencies. Businesses may be required to file estimated tax returns and pay estimated taxes on a quarterly basis.

For federal tax information, contact: U.S. Internal Revenue Service, 275 Peachtree Street N.E., Atlanta, Ga. 30303: 522-0050. State tax information can be obtained from: Georgia Department of Revenue, Georgia Income Tax Division, P.O. Box 38067, Atlanta, Ga. 30334: 656-4180.

If you plan to own a business in Georgia, the door is wide open. But first, think about complying with the numerous regulations. You must conform to the rules, or your business will have its door slammed in a hurry.

The IRS has a number of publications that are available upon request to small businesses. One of the most helpful is *Your Business Tax Kit*, which includes data and forms for a Federal Employer Identification Number and a tax guide for small businesses. That can be ordered by calling Forms and Publications at 1-800-424-3676 or through a visit to the I.R.S. office.

In Georgia there is a 3 percent sales and use tax which applies to the retail purchase, retail sale, rental, storage, use or consumption of tangible personal property and certain services. In other words, sales tax must be collected on just about every tangible item sold, except for the exempt categories of prescription drugs, eyeglasses and contact lenses.



A sales tax number is required for each business before opening. The number plus instructions for collecting, reporting and remitting the money to the state on a monthly basis can be obtained from: Georgia Department of Revenue, Sales and Use Tax Division, Registration Section, 310 Trinity-Washington Building, Atlanta, Ga. 30334; 656-4060.

In addition, some of the metro Atlanta counties have exercised local option issues to increase their sales and use tax to pay for certain civic projects. In Cobb, Gwinnett and DeKalb Counties the sales tax is 4 percent, while in Fulton it's 5.

Businesses are required by the state to pay unemployment insurance tax if the company has one or more employees for 20 weeks in a calendar year or it has paid gross wages of over \$1,500 in a calendar quarter. The taxes are payable at a rate of 2.7 percent on the first \$7,500 in annual wages of an employee. Unemployment insurance must be reported and returns made to the state. For information, contact: Georgia Department of Labor, Adjudication Section, Sussex Place, 148 International Blvd., Room 727, Atlanta, Ga. 30303; 656-5590.

If a business employs three or more, workers' compensation insurance must be carried to provide protection to those injured in on-the-job accidents. The State Board of Workers' Compensation aids people who need claims assistance. For information on how to obtain the insurance, contact: State Board of Workers' Compensation, Suite 1000, South Tower, 1 CNN Center, Atlanta, Ga. 30303-2705; 656-3875.

Every owner needs to be aware of the federal and state laws concerning minimum wages. Even if a business is not covered by federal minimum wage laws, it is still subject to the Georgia requirements. Federal information can be obtained from: U.S. Department of Labor, Employment Standards Administration, Wage and Hour Division, Room 105, 1371 Peachtree St. N.E., Atlanta, Ga. 30367; 347-2818. Georgia information comes from: Georgia Department of Labor, Inspection Division, I.B.E.W. Building, Room 525, 501 Pulliam St. S.W., Atlanta, Ga. 30312; 656-3018.

Incorporating a business allows a firm to take advantage of the limited liability of a corporation. A corporation is usually a taxpayer separate from its owners, unless the company decides it wants to be an "S" corporation for special tax consideration. Contact an attorney or accountant for information on just what each designation can mean to the firm.

Legal assistance will be needed to incorpo-

rate. Basically, this involves checking with the Secretary of State to see if the name chosen for the business is available. Typed Articles of Incorporation must then be submitted, along with a fee. Additionally, a notice of incorporation must be published in the official legal newspaper for the county. There is also a fee for this printing. Each business must submit a consent from a person who will act as registered agent for service of process on the corporation. This consent must be filed along with the Articles of Incorporation. The Articles must name at least three directors, unless the corporation will have two or fewer shareholders. For more information, contact: Secretary of State, Corporations Division, 306 West Tower, Floyd Building, Two Martin Luther King Jr. Drive S.E., Atlanta, Ga. 30334; 656-2185.

Trademarks and service marks may be registered under federal laws or state laws. In Georgia, an application form should be filed, along with a \$15 fee and copies of the trademark or service mark. Registration is then good for 10 years. In Georgia, contact: Special Services Division, Secretary of State, Corporations Division, 306 West Tower, Floyd Building, Two Martin Luther King Jr. Drive S.E., Atlanta, Ga. 30334; 656-2861. For federal information, contact: U.S. Department of Commerce, Trademark Office, 2021 Jefferson Davis Highway, Arlington, Va. 22202; (703) 557-3881.

Businesses that use any name other than the owner's must register this fictitious name with the county as required by the Trade Name Registration Act. This registration requirement does not apply to corporations doing business under their corporate names or to those practicing any profession under a partnership name. For information, contact the Clerk of the Superior Court for the county in which the business is located.

Clerk of the Superior Court:  
Clayton County — 477-3389  
Cobb County — 429-3110  
DeKalb County — 371-2836  
Fulton County — 572-2411  
Gwinnett County — 962-1595

And last but not least, if an established business is to be bought, the purchaser must comply with the Bulk Sales Law. This law requires that at least five days before the actual purchase, each creditor must be personally notified of the proposed sale. In counties of more than 200,000 population, this intent must be published at least one time in the county legal newspaper not less than seven days prior to completion of the purchase. An attorney should be consulted about this procedure.

## Small Business Directory

Starting a business is a tremendous responsibility, but the load be lightened by taking advantage of the many resources available to small-business people in the metro Atlanta area. These resources are too numerous to describe in detail, but in addition to the SBA, it includes the Small Business Development Centers, and the Service Corps of Retired Executives.

Listed here is a telephone directory for more information for the small-business person.

### Government Agencies

Department of Commerce — 347-4873  
U.S. Government Bookstore — 331-6947  
Federal Information Center — 331-6891  
Georgia Department of Industry & Trade — 656-3545  
Small Business Administration — 347-2441  
Chambers of Commerce  
Atlanta — 586-8400  
Clayton — 478-6549  
Cobb — 980-2000  
DeKalb — 378-8000  
Gwinnett — 963-5128

### Management/Technical Assistance

Atlanta Economic Development Corporation (AEDC) — 658-7000  
Business Council of Georgia — 223-2264  
Georgia Tech's Economic Development Laboratory — 894-3841  
National Federation of Independent Business (NFIB) — 876-8516  
Atlanta Regional Commission — 656-7715

### Minority Business Development

Atlanta Business League — 584-8126  
Atlanta Minority Business Development Center — 586-0973  
National Alliance of Business (NAB) — 522-9350

Office of Minority Business Development Agency — 347-4091

### Startups and Expansions

GA Department of Community Affairs (DCA) — 656-3836  
GA Tech's Advanced Technology Development Center (ATDC) — 894-3575  
GA Vietnam Veterans Leadership Program (GVVLP) — 565-8444  
Greater Atlanta Small Business Project (GRASP) — 572-2897  
Service Corporation of Retired Executives (SCORE) — 347-2441  
GA Tech's Procurement Counseling Center — 894-6121

### Small Business Development Centers

Georgia State University — 651-3551  
Kennesaw College — 423-6450  
Clayton State College — 961-3440 C. Gwinnett Technical School — 963-4902

### Miscellaneous

Better Business Bureau — 688-4910  
Credit Bureau of Atlanta — 329-1701  
Dun & Bradstreet — 436-7222  
NCR Corporation — 321-8800



**U.S. Small Business Administration**  
Management Assistance  
Support Services

Management Aids  
Number 2.008

**SBA**

# **Business Plan for Small Construction Firms**





## **Summary**

**A business plan can provide the owner-manager or prospective owner-manager of a small construction firm with a pathway to profit. This Aid is designed to help an owner-manager in drawing up a business plan.**

**In building a pathway to profit you need to consider the following questions: What business am I in? What do I sell? Where is my market? Who will buy? Who is my competition? What is my sales strategy? How much money is needed to operate my firm? How will I get the work done? What management controls are needed? How can they be carried out? When should I revise my plan? Where can I go for help?**

**No one can answer such questions for you. As the owner-manager you have to answer them and draw up your business plan. The pages of this Aid are a combination of text and workspaces so you can write in the information you gather in developing your business plan—a logical progression from a commonsense starting point to a commonsense ending point.**

## **A Note On Using This Aid**

It takes time and energy and patience to draw up a satisfactory business plan. Use this Aid to get your ideas and the supporting facts down on paper. And, above all, make changes in your plan on these pages as that plan unfolds and you see the need for changes.

Bear in mind that anything you leave out of the picture will create an additional cost, or drain on your money, when it unexpectedly crops up later on. If you leave out or ignore too many items, your business is headed for disaster.

Keep in mind, too, that your final goal is to put your plan into action. More will be said about this step near the end of this Aid.

## **What's In This For Me?**

The hammer, trowel, pliers, and wrench are well known tools of the construction industry. They have their various uses and are needed to get the work done.

Management is another tool that the owner-manager of a construction firm must use. Each job must be planned and organized if the firm is to run smoothly and efficiently. The business plan will help you increase your skill as a manager.

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Because of the diversification in the construction industry, you may be engaged in residential, commercial, or industrial construction. You may be either a general or specialty contractor. But, the same basic managerial skills are needed. This plan will serve as a guide to the various areas that you as a manager will be concerned with. As you work through this plan, adapt it to your own particular needs.

When complete, your business plan will help guide your daily business activities. When you know where you want to go, it is easier to plan what you must do to get there. Also, the business plan can serve as a communications device which will orient key employees, suppliers, bankers, and whoever else needs to know about your goals and your operations.

Whether you are just thinking about starting your own firm or have already started, the business plan can help you. As your skill as a manager increases so will the number of jobs you can effectively control. The careful completion of this plan may point out your limitations. This is important. To be a successful contractor you must not only know your business thoroughly, but must also know your limitations and seek professional advice in these areas.

## **Why Am I In Business?**

Most contractors are in business to make money and be their own boss. Very important reasons. But, don't forget, no one is likely to stay in business unless you also satisfy a consumer need at a competitive price. Profit is the reward for satisfying consumer needs in a competitive economy.

In the first years of business, your profits may seem like a small return for the long hours, hard work, and responsibility of being the boss. But there are other rewards associated with having your own business. For example, you may find satisfaction in helping to put groceries on your employees' tables. Or, maybe your satisfaction will come from building a business you can pass on to your children.

Why are you in business? \_\_\_\_\_  
\_\_\_\_\_

## **What Business Am I In?**

At first glance this may seem like a rather silly question. You may say, "If there is one thing I'm sure of, it's what business I'm in." But wait. Let's look further into the



question. Suppose you say, "I build houses." Are you a speculative or custom builder? Are you a remodeler? Are you a subcontractor? Can you schedule a complete job and make money? By planning according to this decision, you should realize the value of this type of thinking in dollars.

Consider this example. Bob Rogers\* started a small construction business shortly after World War II. Because of Mr. Rogers' skill and talent for design, he directed all his activity toward building taverns. There was enough call for this type of building to keep him and his crew busy until the early 60's. Then sales began to fall off.

By moving his shop to smaller quarters with less overhead and by laying off half his crew, he was able to maintain his business to his satisfaction the rest of his life. After his death, his son examined the situation and decided that he wasn't really in the business of building commercial bars. He was in the business of custom finishing.

Today his business is prospering. He is building cabinets and small bars for private homes. His company also does other finishing work which requires the craftsmanship his crew is capable of.

In the space below, state what business you're really in.

What are your reasons for this opinion?

## Marketing

When you have decided what sort of construction business you're really in, you have made your first marketing decision. Now, in order to sell your service or product, you must face other marketing decisions.

Your marketing objective is to find enough jobs at the right times to provide a profitable continuity for your business. Your job starts must be coordinated to eliminate the down time between jobs. In other words, you want to get enough jobs, starting at the right times, to keep from being broke between jobs.

Unless an individual can come up with enough ideas to keep a crew working 12 months a year, maybe he or she is not ready for a construction business.

\*All names in Aids are fictitious.

### Where Is Your Market?

Describe your market area in terms of customer profile (age, school needs, income, and so on) and geography. For example, if you are a custom builder, you may decide to build homes in the \$80,000 to \$130,000 price range. This would mean that your customers will have to have incomes in the middle to upper-middle class ranges. You may also decide that you can profitably build these homes on the owner's lot if it is located within a radius of 30 miles from your office. (The significance of a customer profile is that it will help you narrow your advertising to those media that will reach the potential customer you have profiled.) In the space below describe your market in terms of customer profile and geography.

My Product   Types of Customers   Location of Customers

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Now that you have described what you want in terms of customer and location, what is it about your operation that will make these people want to buy your service? For instance, quality work, competitive prices, guaranteed completion dates, effective advertising, unique design, and so on.

Write your answer here.

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### Advertising

You have determined what it is you're marketing, who is going to buy it, and why they're going to buy it. Now you have to decide on the best way to tell your prospective customers about your product.

What should your advertising tell prospective customers?

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What form should your advertising take? Ask the local media (newspapers, radio and television stations, and printers of direct mail pieces) for information about their services and the results they offer for your money.

How you spend advertising money is your decision, but don't fall into the trap that snares many advertisers. As one consultant describes this pitfall: It is amazing the way many business managers consider themselves experts on advertising copy and media selection without any experience in these areas.



The following workblock should be useful in determining what advertising is needed to sell your construction service.

Form of Advertising	Size of Audience	Frequency of Use	Cost of A single ad	Estimated Cost
_____	_____	_____	x \$ _____	- \$ _____
_____	_____	_____	x \$ _____	- \$ _____
_____	_____	_____	x \$ _____	- \$ _____
_____	_____	_____	x \$ _____	- \$ _____
			Total \$ _____	

### Competition

The competition in the construction industry often results in low profit margins. However, if you are just starting or are a relatively small firm, this does not put you at a disadvantage. The smaller firm can often compete with the bigger outfit because of lower overhead expense. For example, your office may be in your home, saving that expense. You can often work right out of your truck, saving the expense of a field office.

Competition is largely price competition, although a good reputation for quality and efficiency is beneficial. But, the result of any competition is a high failure rate for poor planners and poor performers. This points out the need for careful planning, particularly in the areas of estimating and bidding.

In order to see what you are up against competition-wise, answer the following questions so you can plan accordingly.

Who will be your major competitors? \_\_\_\_\_

How will you compete against them? \_\_\_\_\_

### Sales Strategy

The market for the construction industry is unique in many ways. As a contractor you will find your market to be dependent on such variables as the state of the economy, local employment stability, the seasonality of the work, labor relations, good subcontractors and interest rates. Also, as a contractor, you will find that you are unavoidably dependent on others, such as customers or financing institutions for payment, and other contractors for performance of their work. You will also want to take your cash flow into consideration when you estimate and bid on a job. The money must come in time to meet your own obligations.

### Estimating

Whether an owner-manager in the construction business succeeds—makes a profit or not—depends to a great extent on bidding practices. Therefore, you must make careful and complete estimates.

Many of the more successful contractors attribute their success to their estimating procedures. They build the job on paper before they submit a bid. In doing this, they break the job down into work units and pieces of material. Then, they assign a cost to each item. The total of these costs will be the direct construction cost. You must also figure on the indirect costs of a job. For instance, you will have overhead expenses such as the cost of maintaining your office, trucks, license fees, and so on. The estimate should also consider any interest charges you will pay on money you borrow to get the job under way. You have insurance fees to pay, surety bond premiums, travel expenses, advertising costs, office salaries, lawyer's fees, and so on. These must also be paid out of your gross income.

Trade associations, as one of their services, often provide their members with a package of business forms. The cost estimate form would be included in this package. The obvious advantage in using these forms is that they are specifically designed for the particular trade.

Regardless of what estimate form you use, it should include such headings as "activity," "material," "labor," "subcontracts," and "estimated cost." And it should have areas for direct construction costs, indirect construction costs, overhead, and profit.

In addition, a column for the actual cost compared to the estimated cost of a specific work item will make this form an invaluable record. Here you would have a handy reference to evaluate the profitability of a job after it is complete. It would show you where your estimate was high or low, and enable you to adjust future bids on similar projects. This added column will also be necessary when it comes time for your financial accounting.

### Bidding

Your decision to bid or not to bid on a particular job should be determined by several factors. First, do you have the capacity to complete the job on schedule and according to specifications. Beware of overextending yourself out of business. You have to operate within your known capabilities. On any job, you must follow all the details of the work yourself, or find competent supervision.



## Bonding

The practice of bonding has been a traditional way of life for anyone engaged in contract construction. Bonding companies provide bonds for a certain percentage of the contract price. There are three main types of bonds:

- (1) Bid bonds assure that the bidder is prepared to perform the work according to the terms of the contract if successful in the bid.
- (2) Performance bonds assure completion of the job according to plans and specifications.
- (3) Payment bonds assure anyone dealing with the bonded contractor that they will be paid.

The effect that bonding companies have had on contractors is evident in the area of competition. The customer, by requiring that the contractor is bonded, is more or less assured of adequate completion of the job. Therefore, contractors are compared on a basis of price. Also, banks are often more lenient to bonded contractors.

Bonding companies usually require the contractor to have proven experience and the organizational financial capacity to complete the project. This can be a real stumbling block to the new construction firm.

With the widespread use of bonding requirements, the competition that is generated often leads the inexperienced contractor to submit bids that are unrealistically low. One or two such mistakes often can spell bankruptcy.

Will you need bonding \_\_\_\_\_ often, \_\_\_\_\_ occasionally, \_\_\_\_\_ seldom?

Where will you get your bond? \_\_\_\_\_

What will the terms be? \_\_\_\_\_

The Small Business Administration has a surety bond program designed to help small and emerging contractors who might have previously been unable to get bonding. SBA is authorized to guarantee up to 90 percent of losses incurred under bid, payment, or performance bonds on contracts up to \$500,000. Application for this assistance is available from any SBA field office.

## Planning the Work

When your marketing efforts result in jobs to be done, the problem becomes one of production. How will you plan the work so that the job gets done on time?

No matter how you plan the work, your plan should assist you in two specific ways: (1) it should help you maintain your production schedule, and (2) it should allow you to adjust production to meet changed conditions, such as bad weather.

In planning the work, keep in mind two things: (1) the timing of starts, and (2) the timing of the various steps in the construction of your company. If you have sufficient help and sufficient supervisory personnel, it will be possible for you to engage in as many projects as you can control. The size and nature of the job must be considered here also.

The timing of the steps of constructions (the work scheduling) will show the various operations in sequence and assign a working day designation to each with a space for the calendar day designation. Several operations may be in progress simultaneously. Such a work schedule will show at a glance whether the work is progressing at the right time. Many companies offer commercial scheduling boards designed for this purpose.

Below is a partial work schedule to demonstrate how yours may be set up. Note that there is a column that can be filled in with either a solid mark or an "X" to indicate either partial or completed work. When you look at a particular calendar day, an "X" next to it would indicate that you're on schedule. An open square indicates a delay. Here, then, is a convenient way to see trouble spots that are causing delays and it gives you an opportunity to take corrective action.

### Working Day

Activity	Start	Finish	Calendar Day	Complete
1. Layout	1	1	15	☒
2. Foundation Forms	1	2	16	☒
3. Foundation Pour	3	3	19	☒

(indicates ½ complete)

You should save your work schedules. They will form the basis for future estimates. For example, if you are estimating a particular job, you have information on the steps of production, an indication of what materials you'll need and when you'll need them, an indication of how long the job will take, and any peculiarities that may affect the completion of the job. When you consider all these things, you'll be more likely to submit an accurate bid.



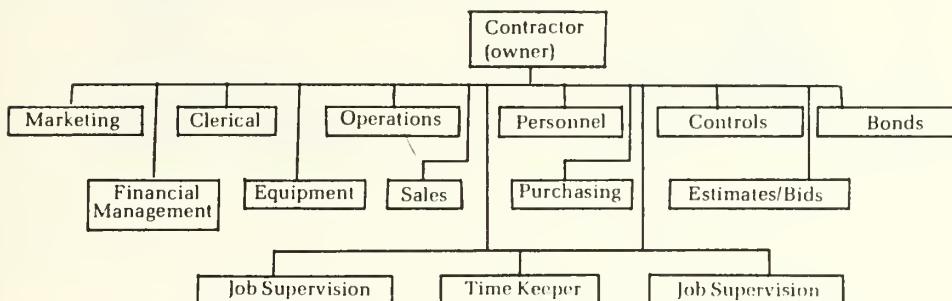
By carefully keeping such records, you will also have an indication of how many workers you will need. Perhaps, if the work falls behind schedule, you may need to bring more workers to the job to assure scheduled completion and avoid a possibly larger financial loss from penalization, if that is called for in your contract. Also, such records will give you an indication of the organizational structure you may need for your firm.

## Getting the Work Done

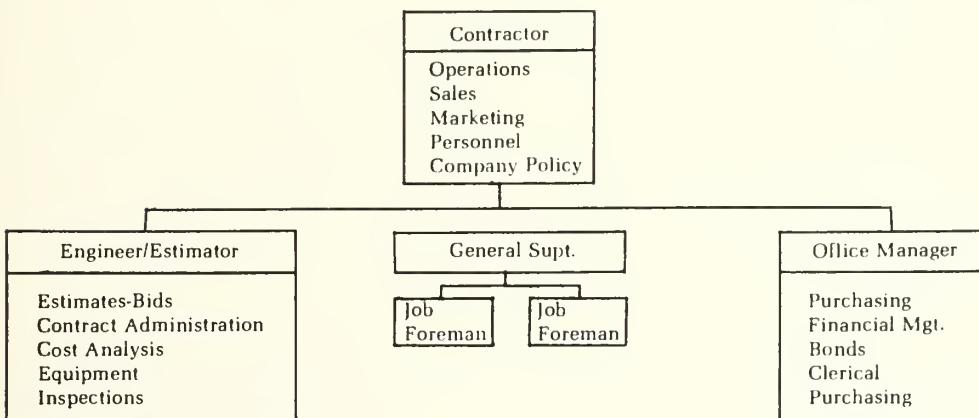
If your firm is going to run efficiently, you will need organization. Organization is essential because as your

company grows you will not be able to do all the work. You have to delegate work, responsibility, and authority. The organization chart is a useful device in getting this done. It shows quite clearly who is responsible for the major activities of your business.

At first, many construction companies are one man shows. It is up to the owner to do almost everything. In this case the organization chart might look something like this:

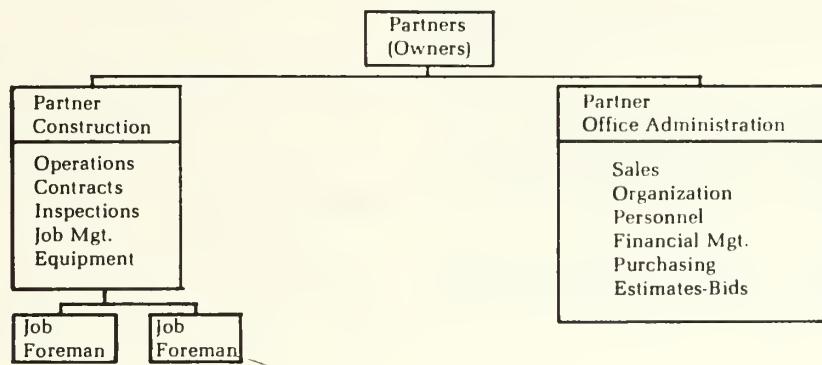


As the company grows, perhaps specialists are added, such as an engineer/estimator, an office manager, and a general superintendent. The organization chart then begins to look something like this:





Often, people with complementary experience and skills, such as work experience and office experience will form a partnership. The organization chart will look like this:



Draw an organization chart for your company.



## What are Your Personnel Requirements?

Will you carry a permanent crew or hire workers as the need arises? \_\_\_\_\_

Will you use union or nonunion labor? \_\_\_\_\_

How many workers will you need? \_\_\_\_\_

What is the hourly rate you will pay? \_\_\_\_\_

What will fringe benefits cost? \_\_\_\_\_

Will you supervise the work yourself or hire a foreman?

If you hire a foreman, what will this salary be? \_\_\_\_\_

Will you need clerical help? \_\_\_\_\_ What will it cost? \_\_\_\_\_

as carefully as the actual construction. The payment for each job must cover the direct and indirect construction costs as well as the allocated share of overhead.

Accounting requirements will vary from company to company and from trade to trade. Your accountant will help you set up the accounting system which will best meet your needs.

However, you must make the overall plans yourself. You must develop the goals necessary to guide and manage your business. This overview will prove invaluable in establishing a good working relationship with your banker (or other lender) and bonding company.

In your financial planning, the first consideration is where the dollars will come from. In dollars, how much business (sales) will you be able to do in the next 12 months? \$ \_\_\_\_\_

## Equipment

What special equipment will you need (assuming that your work force will supply their own hand tools)?

Equipment	Rent	Buy	Your Cost
_____	_____	_____	\$ _____
_____	_____	_____	\$ _____
_____	_____	_____	\$ _____
_____	_____	_____	\$ _____
_____	_____	_____	\$ _____

Will you need an office or use your home? \_\_\_\_\_

If you will need an office, what will the rent and other expenses cost? \_\_\_\_\_

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## Put Your Plan Into Dollars

Just as with the other aspects of managing a construction business, the basic unit of financial management is the job. The financial aspects of a job must be planned

## Expenses

In connection with annual sales volume, you need to think about expenses. For example, if you plan to do \$100,000 worth of work, how much will it cost you to do this amount of business? And even more important, what will be left over as profit at the end of the year?

Profit is your pay. Even if you pay yourself a salary for living expenses, your business must make a profit if it is to continue year after year and pay back the money and time you invest in it. Profit helps your firm to be strong—to have a financial reserve for any lean periods.

The "Expenses Worksheet" is designed to help you figure your yearly expenses. To use this worksheet, you need to get one set of figures—the operating ratios for your line of business. If you don't have these figures, check with the trade association which serves your area of the construction industry.

## Matching Money and Expenses

After you have planned for your month to month expenses, the next question is: Will there be enough money coming in to meet these expenses and to sustain your company in the event that there is down time until your next job?

The cash forecast is a management tool which can eliminate much of the anxiety that can plague you during lean month. Use the worksheet "Estimated Cash Forecast," or ask your accountant to use it, to estimate



the amounts of cash that you expect to flow through your business during the next 12 months.

Remember that the expenses of buying the materials and supplies for a particular job may occur a month or two before a payment is made. The "Estimated Cash Forecast" should show this.

Estimated Cash Forecast	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Expected Available Cash												
Cash Balance												
Expected Receipts												
Job A												
Job B												
Job C												
Bank Loans												
Total Expected Cash												
Expected Cash Requirements												
Job A												
Job B												
Job C												
Equipment Payments												
Taxes												
Insurance (including surety bond payments)												
Overhead												
Loan Repayments												
Total Cash Required												
Cash Balance												
Total Loans Due to Bank												



## Expenses Worksheet

	Sample Figures for Specified Contractors*	Your Annual Sales Dollar Amount	Your Sales in Jan	Your Sales in Feb	Your Sales in Mar	Your Sales in Apr	Your Sales in May	Your Sales in Jun	Your Sales in Jul	Your Sales in Aug	Your Sales in Sep	Your Sales in Oct	Your Sales in Nov	Your Sales in Dec
<b>100 DH's.</b>														
<b>Sales</b>														
Cost of Sales	44.45	—	—	—	—	—	—	—	—	—	—	—	—	—
<b>Gross Profit</b>	\$5.55	—	—	—	—	—	—	—	—	—	—	—	—	—
<b>Controllable expenses</b>														
Outside labor	1.15	—	—	—	—	—	—	—	—	—	—	—	—	—
Operating supplies	2.34	—	—	—	—	—	—	—	—	—	—	—	—	—
Gross wages	22.78	—	—	—	—	—	—	—	—	—	—	—	—	—
Repairs and maintenance	.59	—	—	—	—	—	—	—	—	—	—	—	—	—
Advertising	1.12	—	—	—	—	—	—	—	—	—	—	—	—	—
Car and delivery	2.04	—	—	—	—	—	—	—	—	—	—	—	—	—
Bad debts	.03	—	—	—	—	—	—	—	—	—	—	—	—	—
Administrative and legal	.48	—	—	—	—	—	—	—	—	—	—	—	—	—
Miscellaneous expenses	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—
Total controllable expenses	31.56	—	—	—	—	—	—	—	—	—	—	—	—	—
<b>Fixed expenses</b>														
Rent	1.00	—	—	—	—	—	—	—	—	—	—	—	—	—
Utilities	1.41	—	—	—	—	—	—	—	—	—	—	—	—	—
Insurance	1.16	—	—	—	—	—	—	—	—	—	—	—	—	—
Taxes and licenses	.85	—	—	—	—	—	—	—	—	—	—	—	—	—
Depreciation	10	—	—	—	—	—	—	—	—	—	—	—	—	—
Total fixed expenses	1.65	—	—	—	—	—	—	—	—	—	—	—	—	—
Total expenses	37.74	—	—	—	—	—	—	—	—	—	—	—	—	—
Net profit (before income tax)	17.81	—	—	—	—	—	—	—	—	—	—	—	—	—

\*These percentages are taken from *Barometer of Small Business*, Accounting Corporation of America. These figures are presented only as a sample and refer to specifically contractors with an annual gross volume between \$10,000 and \$25,000. The percentages are from one business to another.



## Is Additional Money Needed?

In your planning you may find periods when you will be short of cash. For example, when you start a job you will need materials and supplies. Perhaps it may be a month or two before your first payment. What do you do in the interim if trade credit will not completely satisfy your cash needs?

Your bank may be able to help with a short term loan. If a banker is to lend you money on either a short or long term, he or she will want to know whether your company's financial condition is weak or strong. The bank officer will ask to see a balance sheet.

A blank balance sheet is included. Even if you don't need to borrow, use it. Or, have your accountant use it to draw the "picture" of your firm's financial condition. Moreover, if you don't need to borrow money, you may want to show your plan to the bank that handles your company's account. It is never too early to build good relations with your banker. For the time may come when you will have to borrow.

**Current Balance Sheet**  
for  
(name of your firm)

as of \_\_\_\_\_  
(date)

Assets	
Current Assets	\$_____
Cash	\$_____
Receivables	\$_____
Cost of jobs in progress	\$_____
Inventories of supplies and tools	\$_____
Total Current Assets	\$_____
Fixed Assets	\$_____
Other Assets	\$_____
Total Assets	\$_____

Liabilities	
Current Liabilities	
Notes payable	\$_____
Accounts payable	\$_____
Miscellaneous current liabilities	\$_____
Total Current Liabilities	\$_____
Equipment Contracts	\$_____
Owner's equity	\$_____
Total Liabilities	\$_____

## Control and Feedback

To make your plan work you will need feedback at the various stages of your management process. When you approach a job as a manager, you will need to plan the job, direct the job, and control the job. Throughout this process, you will need adequate financing. Thus, the management controls you set up should supply you with the information you need to keep your operation "on the money."

During the planning stage, you will need to carefully calculate your bid estimate. To direct the job, you will need your job cost analysis to make sure that the job is going to make a profit. And, to control the job, your forces must be organized. This requires the organized production of any given job (work schedule), competent personnel, and your personal follow-up to insure efficient performance.

## Is Your Plan Workable?

Now that you've planned this far, step back and take a look at your plan. Is it realistic? Can you do enough business to make a living.

Now is the time to revise your plan if it isn't workable, not after you've invested your time and money. If you feel that some revisions are needed before you start your own business, then make them. Go back to the cash flow and adjust the figures. Better, show your plan to someone who has not had a hand in making out your business plan. Your banker, contact man at SBA, or any outside advisor may be able to point out your strong points which if emphasized could turn into dollars.

If you have strong doubts about your business or your ability to run it, it might be better to delay going into business until you feel as comfortable with the tools of management as you are with the tools of your trade.

## Keeping Your Plan Up To Date

How many people in this world can predict the future? Very few indeed! You can expect things to change. You can expect circumstances to be different from what you expected. This is only natural. The difference between successful and unsuccessful planning is often only the ability to keep alert and watch for changes. Stay on top of changing conditions and adjust your plan accordingly.

In order to adjust your plan to account for changes, an owner-manager must:



1. Be alert to the changes that come about in your industry, your market, and in your customers.
2. Check your plan against these changes.
3. Determine what revisions, if any, are needed in your plan.

Whatever methods you use to keep up with changing conditions is up to you. Once a month or so, go over your plan. See whether it needs adjusting. If revisions are needed, make them and put them into action.

## Put Your Plan Into Action

When your plan is as near on target as possible, you are ready to put it into action. Keep in mind that action is the difference between a plan and a dream. If a plan is

not acted upon, it is of no more value than a pleasant dream that evaporates over the breakfast coffee.

The first action step would be acquiring enough capital to get started. Do you already have the money? Will you borrow it from friends, relatives, or a bank? Where and when will you hire competent employees?

What else needs to be done? Look for positive action steps that will get your business rolling. For example, where and how will you get whatever licenses you need to be a contractor? (These requirements differ from state to state. A summary of licensing, prequalification, and tax information may be found in *Summary of State Regulation and Taxes Affecting General Contractors*, published annually by the American Insurance Association.)

In the following space, list the things that you must do to get your business off the drawing board and into action. Give each item a date so that it can be done at the right time.

Action

Completion Date

_____	_____
_____	_____
_____	_____

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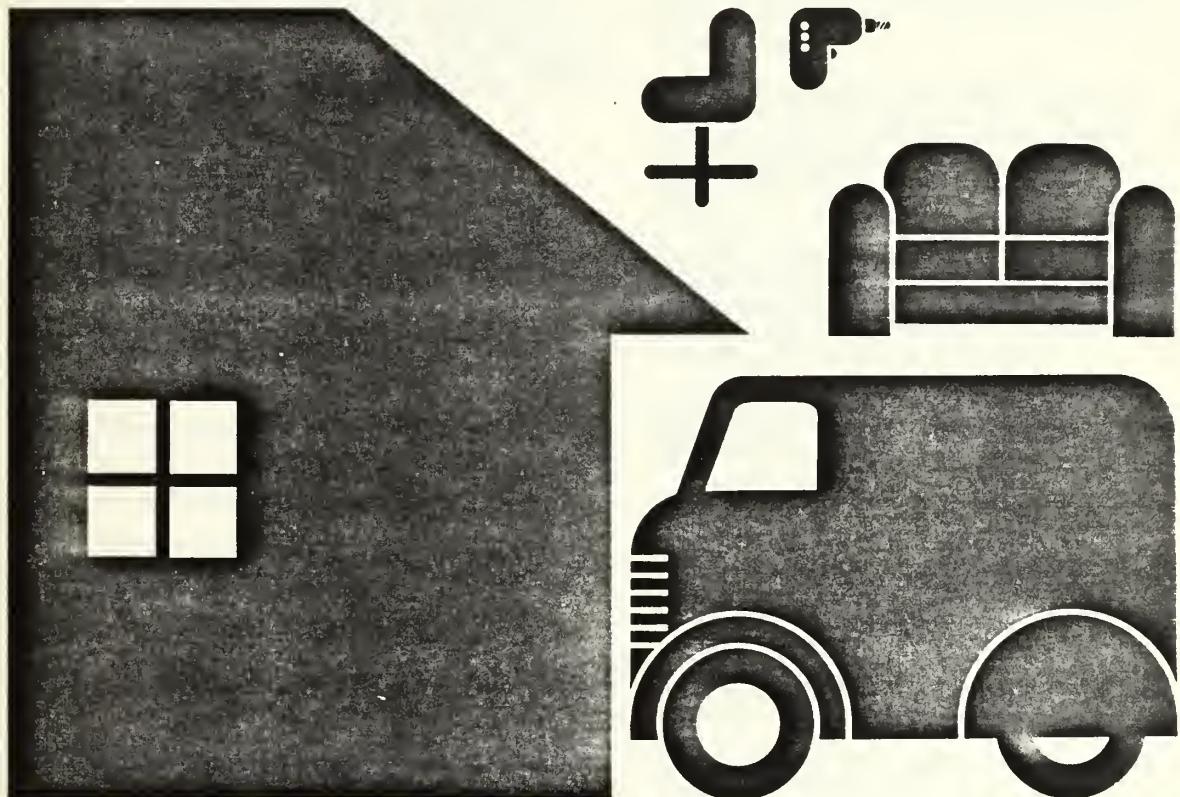
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Number 2.014

**SBA**

# Should You Lease or Buy Equipment?

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## Summary

**Small businesses have difficulty raising capital—that's no secret. This difficulty (among other reasons) has caused many to look at leasing as an alternative financing arrangement for acquiring the use of assets. All types of equipment leasing—from motor vehicles to computers, from manufacturing machinery to office furniture—have become more and more attractive.**

This Aid describes various aspects of the lease/buy decision. It lists advantages and disadvantages of leasing and provides a format for comparing costs of the options.

The **sale and leaseback** is similar to the financial lease. The owner of an asset sells it to another party and simultaneously leases it back to use it for a specified term. This arrangement lets you free the money tied up in an asset for use elsewhere. You'll find that buildings are often leased this way.

You may also hear leases described as net leases or gross leases. Under a **net lease** the lessee is responsible for expenses such as those for maintenance, taxes, and insurance. The lessor pays these expenses under a **gross lease**. Financial leases are usually net leases.

Finally, you might run across the term **full payout lease**. Under a full payout lease the lessor recovers the original cost of the asset during the term of the lease.

## What Is a Lease?

A lease is a long term agreement to rent equipment, land, buildings, or any other asset. In return for most—but not all—the benefits of ownership, the user (**lessee**) makes periodic payments to the owner of the asset (**lessor**). The lease payment covers the original cost of the equipment or other asset and provides the lessor a profit.

## Types of Leases

There are three major kinds of leases: the financial lease, the operating lease, and the sale and leaseback.

**Financial leases** are most common by far. A financial lease is usually written for a term not to exceed the economic life of the equipment. You will find that a financial lease usually provides that:

Periodic payments be made,

Ownership of the equipment reverts to the lessor at the end of the lease term,

The lease is noncancelable and the lessee has a legal obligation to continue payments to the end of the term, and

The lessee agrees to maintain the equipment.

The **operating lease**, or "maintenance lease," can usually be cancelled under conditions spelled out in the lease agreement. Maintenance of the asset is usually the responsibility of the owner (lessor). Computer equipment is often leased under this kind of lease.

## Kinds of Lessors

As the use of leasing has increased as a method for businesses to acquire the use of equipment and other assets, the number of companies in the leasing business has increased dramatically. Leasing is now a billion dollar industry.

Commercial banks, insurance companies, and finance companies do most of the leasing. Many of these organizations have formed subsidiaries primarily concerned with equipment leasing. These subsidiaries are usually capable of making lease arrangements for almost anything.

In addition to financial organizations, there are companies which specialize in leasing. Some are engaged in general leasing, dealing with just about any kind of equipment. Others specialize in particular equipment, such as trucks or computers, for example.

Equipment manufacturers are also occasionally in the leasing business. Of course, they usually lease only the equipment they manufacture.

## Advantages of Leasing

The obvious advantage to leasing is acquiring the use of an asset without making a large initial cash outlay. Compared to a loan arrangement to purchase the same equipment, a lease usually:

Requires no downpayment, while a loan often requires 25 percent down;

Requires no restriction on a company's financial operations, while loans often do;



Spreads payments over a longer period (which means they'll be lower) than loans permit; and

Provides protections against the risk of equipment obsolescence, since the lessee can get rid of the equipment at the end of the lease.

There may also be tax benefits in leasing. Lease payments are deductible as operating expenses if the arrangement is a true lease (and the Internal Revenue Service agrees it is). Ownership, however, usually has greater tax advantages through the investment tax credit and depreciation. Naturally, you need to have enough income and resulting tax liability to take advantage of those two benefits.

The investment tax credit may work to the benefit of the lessee as well as the lessor. The credit is a dollar-for-dollar reduction in federal income taxes, equal to 10 percent of the cost of the equipment in the year the equipment is put into use. While the lessor usually takes the tax credit, it may pass part of the benefit on to the lessee in the form of a reduced lease payment.

Leasing has the further advantage that the leasing firm has acquired considerable knowledge about the kinds of equipment it leases. Thus, it can provide expert technical advice based on experience with the leased equipment.

Finally, there is one further advantage of leasing that you probably won't ever be of use to you. In the event of bankruptcy, claims of the lessor to the assets of a firm are more restricted than those of general creditors.

## Disadvantages of Leasing

In the first place, leasing usually costs more because you lose certain tax advantages that go with ownership of an asset. Leasing may not, however, cost more if you couldn't take advantage of those benefits because you don't have enough tax liability for them to come into play.

Obviously, you also lose the economic value of the asset at the end of the lease term, since you don't own the asset. Lessees have been known to grossly underestimate the salvage value of an asset. If they had known this value from the outset, they might have decided to buy instead of lease.

Further, you must never forget that a lease is a long-term legal obligation. Usually you can't cancel a lease agreement. So, if you were to end an operation that us-

ed leased equipment, you might find you'd still have to pay as much as if you had used the equipment for the full term of the lease.

## Federal Tax Treatment of Leases

Full lease payments are deductible as operating costs. You can make these deductions only if the Internal Revenue Service finds that you have a true lease. You cannot take a full deduction for a "lease" that's really an installment purchase.

Although each lease arrangement may be different, there are some general guidelines to meet:

In no way should any portion of the payment be construed as interest.

Lease payments must not be large compared to those that would be required to achieve ownership.

Any renewal option at lease end must be on terms equivalent to what a third party would offer.

Purchase options must be at amounts comparable with fair market value.

## Accounting Treatment of Leases

Historically, financial leases were "off the balance sheet" financing. That is, lease obligations often were not recorded directly on the balance sheet, but listed in footnotes, instead. Not explicitly accounting for leases frequently resulted in a failure to state operational assets and liabilities fairly.

In 1977 the Financial Accounting Standards Board (FASB), the rule-making body of the accounting profession, required that capital leases be recorded on the balance sheet as both an asset and a liability. This was in recognition of the long-term nature of a lease obligation.

## Cost Analysis of Lease v. Loan/Purchase

You can analyze the costs of the lease versus purchase problem through discounted cash flow analysis. This analysis compares the cost of each alternative by considering: the timing of the payments, tax benefits, the in-



terest rate on a loan, the lease rate, and other financial arrangements.

To make the analysis you must first make certain assumptions about the economic life of the equipment, salvage value, and depreciation. The assumptions for the sample problem in this Aid are shown in Figure 1. Figure 2 is the analysis of the lease alternative, and Figure 4 is an analysis of the borrow and buy option.\*

\* A straight cash purchase using a firm's existing funds will almost always be more expensive than the lease or loan/buy options because of the loss of use of the funds. Besides, most small firms don't have the large amounts of cash needed for major capital asset acquisitions in the first place.

#### Figure 1 Example Assumptions

**Equipment Cost:** \$60,000

**Estimated Economic Life:** 10 years

**Lease Terms:** 8 annual\* payments of \$10,363.94 (Apr 10.5%). First payment due upon delivery. Investment tax credit to lessor. Lessee maintains equipment.

**Loan Terms:** 5 years, 7.5% financing at 10% (Apr). 5 annual\* payments of \$11,870.89. First payment due at end of first year.

**Taxes:** Lessee tax rate 50%. Method of depreciation for tax purposes is straight line.

**Other:** Equipment needed for term of lease, 8 years. If firm purchases equipment, it can be sold at end of 8 years for book value. Average after tax cost of capital for lessee is 9%.

\* Payments have been annualized to simplify calculations. Payments are usually made monthly.

**Figure 2**  
**Evaluation of Lease Cost**

(1) End of Year	(2) Lease Payment	(3) (0.50×2)	(4) (2-3)	(5) Discount Factor	(6) (4×5)
0	\$10,363.94	\$5,181.97	\$5,181.97	1.000	\$5,181.97
1	10,363.94	5,181.97	5,181.97	0.952	4,933.24
2	10,363.94	5,181.97	5,181.97	0.907	4,700.05
3	10,363.94	5,181.97	5,181.97	0.864	4,477.22
4	10,363.94	5,181.97	5,181.97	0.823	4,264.76
5	10,363.94	5,181.97	5,181.97	0.784	4,062.66
6	10,363.94	5,181.97	5,181.97	0.746	3,865.75
7	10,363.94	5,181.97	5,181.97	0.710	3,684.38
8	—	—	—	—	—
<b>Net Present Value of Costs of Leasing</b>					<b>\$35,170.03</b>

To evaluate a lease you must first find the net cash outlay (not cash flow) in each year of the lease term. You find these amounts by subtracting the tax savings (which in the example are 50 percent of the payment) from the lease payment (see column 3 of Figure 2). This calculation gives you the net cash outlay for each year of the leases (column 4, Figure 2).

Each year's net cash outlay must next be discounted to take into account the time value of money. This discounting gives you the **present value** of each of the amounts.

The present value of an amount of money is the sum you would have to invest today at a stated rate of interest to have that amount of money at a specified

future date. Say someone offered to give you \$100 five years from now. How much could you take today and be as well off?

Common sense tells you you could take less than \$100, because you'd have the use of the money for the five year period. Naturally, how much less you could take depends on the interest rate you thought you could get if you invested the lesser amount. For example, to have \$100 five years from now at six percent compounded annually, you'd have to invest \$74.70 today. At 10 percent, you could take \$62.10 now and have the \$100 at the end of five years.

Thus, the present value of the net outlay under the lease (\$5,181.97 after tax savings) at the end of year six of the



lease term, for example, is something less than \$5,181.97. For the example in this Aid the appropriate interest rate for discounting the lease payment is the after tax cost (50 percent tax rate, remember) of the loan (set at 10 percent)—or five percent (.50 x 10% = 5%).

This low rate of interest is used because of the certain nature (you know exactly what they'll be) of the payments under a lease contract. So, at an annually compounded five percent interest rate, you would have to invest \$3,865.75 today to have \$5,181.97 at the end of six years.

Fortunately there are tables (Figure 3 is a very modest example) which provide the discount factors for present value calculations. In Figure 3 you will note that the factor for the present value of \$1 six years from now at five percent is .746. This factor (.746) times the after tax lease payment outlay (\$5,181.97) equals \$3,865.75, or exactly the amount you would have to invest today at five percent interest compounded annually to have \$5,181.97 six years hence. There are also relatively inexpensive special purpose pocket calculators programmed to make these calculations.

**Figure 3**  
**Present Value of \$1**

Year	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	.990	.980	.971	.962	.952	.943	.935	.926	.917	.909
2	.980	.961	.943	.925	.907	.890	.873	.857	.842	.826
3	.971	.942	.915	.889	.864	.840	.816	.794	.772	.751
4	.961	.924	.889	.855	.823	.792	.763	.735	.706	.683
5	.951	.906	.863	.822	.784	.747	.713	.681	.650	.621
6	.942	.886	.836	.790	.746	.705	.666	.630	.596	.564
7	.933	.871	.813	.760	.711	.665	.623	.583	.547	.513
8	.923	.853	.789	.731	.677	.627	.562	.540	.502	.467
9	.914	.837	.766	.703	.645	.592	.544	.500	.460	.424
10	.905	.820	.744	.676	.614	.556	.508	.453	.422	.386

\* Periods can be any time period; they do not have to be years.

Why bother with making these present value calculations? Well, you've got to make them to compare the actual cash flows over the time periods. You simply can't realistically compare methods of financing without taking into account the time value of money. It may seem confusing and complex at first, but if you work through the example, you'll begin to see that the technique isn't difficult—just sophisticated.

Figure 2 shows you the present value calculations over the full term of the proposed lease. The sum of the discounted cash flows, \$35,170.03, is called the **net present value of the cost of leasing**. It is this figure that will be compared with the final sum of the discounted cash flows for the loan and purchase alternative.

Evaluation of the borrow/buy option is a little more complicated because of the tax benefits that go with ownership through the investment tax credit, loan interest deductions, and depreciation. In Figure 4, the steps in the calculation are shown above each column head. The interest portion of each loan payment is found by multiplying the loan interest rate (10% here) by the outstanding loan balance for the preceding period.

Note that in the last three years of the analyzed period the cash flow is positive, coming from the tax saving on depreciation and, in the eighth year, from depreciation and the assumption that the asset could be sold for a salvage value of \$12,000. Since these amounts in the last three years are coming in, they are subtracted after discounting from the amounts in the first five years (cash flowing out) to get the **net present value of costs of purchasing**.

As noted earlier, the salvage value is one of the advantages of ownership. It must be considered in making the comparison; however, it is discounted at a higher rate (the firm's assumed average cost of capital, 9%). This rate is used because the salvage value is not known with any certainty, as are the loan payment, depreciation, and interest payments.

When you compare the two alternatives you see that, purely on the basis of the numbers, the buy option looks like the least costly approach. The major difference in cost, of course, comes from the salvage value. If you ignore that value (a highly conservative approach), the alternatives are very close in their net present value of costs. Naturally, it's possible that salvage costs for real asset could be very high or be next to nothing. Salvage value assumptions need to be made carefully.

Thus, while this sort of analysis is useful, you can't make a lease/buy decision solely on cost analysis figures. The advantages and disadvantages discussed earlier in this Aid, while tough to qualify, may outweigh differences in cost—especially if costs are reasonably close.

## Look Before You Lease

A lease agreement is a legal document. It carries a long-term obligation. You must be thoroughly informed of just what you're committing yourself to. Find out the lessor's financial condition and reputation. Be reasonably sure that the lease arrangements are the best you can get, that the equipment is what you need, and that the term is what you want. Remember, once the



agreement is struck, it's just about impossible to change it.

The lease document will spell out the precise provisions of the agreement. Agreements may differ, but the major items will include:

The specific nature of the financing agreement,

Payment amount,

Term of agreement,

Disposition of the asset at the end of the term,

Schedule of the value of the equipment for insurance and settlement purposes in case of damage or destruction,

Who gets the investment tax credit,

Who is responsible for maintenance and taxes,

Renewal options,

Cancellation penalties, and

Special provisions.

**Figure 4**  
**Evaluation of Loan Cost**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
End of Year	Payment	Interest	Principal Repayment	Outstanding Balance	Depreciation	Tax Savings	Nat Cash Flow	Discount Factor	Nat Present Value
0	\$ 15,000.00			\$45,000.00		\$6,000.00*	\$ 9,000.00	1.000	\$ 9,000.00
1	11,870.89	\$4,500.00	\$ 7,370.89	37,629.11	\$6,000.00	5,250.00	8,820.69	0.952	5,303.09
2	11,870.89	3,726.91	6,107.96	29,521.13	6,000.00	4,681.48	6,989.43	0.907	8,339.41
3	11,870.89	2,952.11	6,918.76	20,802.35	6,000.00	4,476.06	7,394.83	0.864	6,369.13
4	11,870.89	2,080.24	9,810.68	10,791.69	6,000.00	4,030.12	7,840.77	0.823	6,452.95
5	11,870.88	1,079.17	10,791.69		6,000.00	3,539.59	6,331.27	0.784	6,531.72
6					6,000.00	3,000.00	(3,000.00)	0.748	(2,236.00)
7					8,000.00	3,000.00	(3,000.00)	0.711	(2,133.00)
8	(12,000.00)**				6,000.00	3,000.00	(3,000.00)	0.877	(2,031.00)
						(12,000.00)	0.502***		(6,024.00)
									<b>\$28,590.30</b>
									<b>Net Present Value of Cost of Purchasing</b>

\* Investment tax credit = 0.10 x \$80,000 - \$6,000.

\*\*Salvage value = book value = \$60,000 - 8 x \$6,000 = \$12,000.

\*\*\*Discount factor using average after tax cost of capital.

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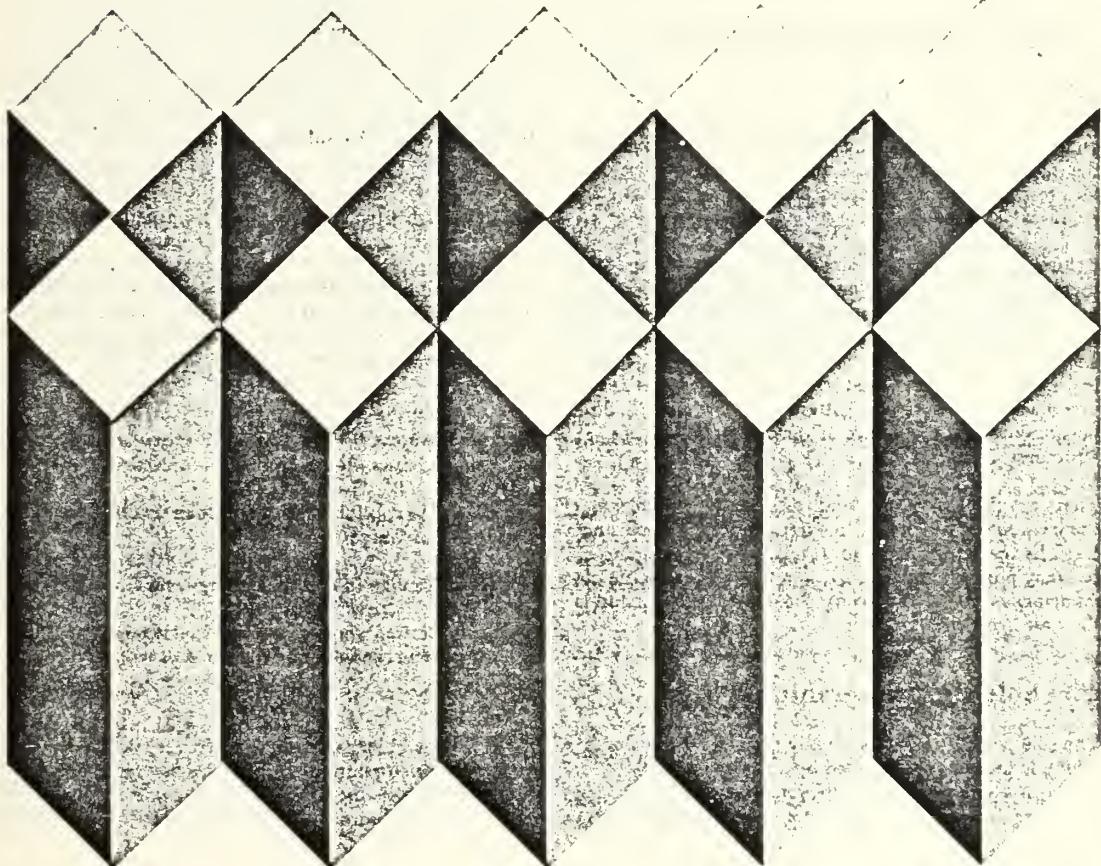
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**SBA**

# Selecting the Legal Structure for Your Firm

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## **Summary**

**There are many reasons today for owner-managers of small businesses to look at the legal structure of their firms. The changing tax laws and fluctuating availability of capital are just two situations which require alert managers to review what legal structures best meets their needs.**

**Each form of business organization has its advantages and disadvantages. This Aid seeks to briefly identify them for the owner-manager who wants to know "what questions to ask" when seeking the proper professional advice.**

If you were to make an analogy between starting a business and playing a card game, you might say, "The game is just for fun, but business is business." Well, you would be right. But let's consider some important similarities.

The game requires skill, strategy, planning, and, most important, a thorough knowledge of the rules. Going into business requires skill (the knowledge of your craft or trade), and it also requires strategy and planning. Most important, to be successful in business, you must understand the rules (or the laws) by which you must conduct your business. All planning and strategy must consider the multitude of local, state, and federal laws and business practices that govern the operation of the business.

Before you enter the complex arena of business and the myriad of laws which influence your freedom of choice and mobility of action, you must first choose the legal structure for your business that will best suit your needs and the needs of your particular business. In order to intelligently select the legal structure for your business, you must ask yourself, "What are my alternatives?" So, let's now look at the nature of various legal business structures.

There are three principal kinds of business structures: the proprietorship, the partnership, and the corporation. Each has certain general advantages and disadvantages, but they must all be weighted to reflect your specific circumstances, goals, and needs. The sole proprietorship is the first firm we'll consider.

## **The Sole Proprietorship**

The sole proprietorship is usually defined as a business which is owned and operated by one person. To establish a sole proprietorship, you need only obtain whatever licenses you need and begin operations.

2

Hence, it is the most widespread form of small business organization.

### **Advantages of the Sole Proprietorship**

**Ease of formation.** There is less formality and fewer legal restrictions associated with establishing a sole proprietorship. It needs little or no governmental approval and is usually less expensive than a partnership or corporation.

**Sole ownership of profits.** The proprietor is not required to share profits with anyone.

**Control and decision making vested in one owner.** There are no co-owners or partners to consult. (Except possibly your spouse.)

**Flexibility.** Management is able to respond quickly to business needs in the form of day to day management decisions as governed by various laws and good sense.

**Relative freedom from government control and special taxation.**

### **Disadvantages of the Sole Proprietor**

**Unlimited liability.** The individual proprietor is responsible for the full amount of business debts which may exceed the proprietor's total investment. This liability extends to all the proprietor's assets, such as house and car. Additional problems of liability, such as physical loss or personal injury, may be lessened by obtaining proper insurance coverage.

**Unstable business life.** The enterprise may be crippled or terminated upon illness or death of the owner.

**Less available capital, ordinarily, than in other types of business organizations.**

**Relative difficulty in obtaining long-term financing.**

**Relatively limited viewpoint and experience.** This is more often the case with one owner than with several.

**NOTE:** A small business owner might very well select the sole proprietorship to begin with. Later, if the owner succeeds and feels the need, he or she can form a partnership or corporation.



## The Partnership

The Uniform Partnership Act, adopted by many states, defines a partnership as "an association of two or more persons to carry on as co-owners of a business for profit." Though not specifically required by the Act, written Articles of Partnership are customarily executed. These articles outline the contribution by the partners into the business (whether financial, material or managerial) and generally delineate the roles of the partners in the business relationship. The following are example articles typically contained in a partnership agreement:

Name, Purpose, Domicile

Duration of Agreement

Character of Partners (general or limited, active or silent)

Contributions by Partners (at inception, at later date)

Business Expenses (how handled)

Authority (individual partner authority in conduct of business)

Separate Debts

Books, Records, and Method of Accounting

Division of Profits and Losses

Draws or Salaries

Rights of Continuing Partner

Death of a Partner (dissolution and winding up)

Employee Management

Release of Debts

Sale of Partnership Interest

Arbitration

Additions, Alterations, or Modifications of Partnership Agreement

Settlements of Disputes

Required and Prohibited Acts

Absence and Disability

Some of the characteristics that distinguish a partnership from other forms of business organization are the limited life of a partnership, unlimited liability of at least one partner, co-ownership of the assets, mutual agency, share of management, and share in partnership profits.

### Kinds of Partners

**Ostensible Partner.** Active and known as a partner.

**Active Partner.** May or may not be ostensible as well.

**Secret Partner.** Active but not known or held out as a partner.

**Dormant Partner.** Inactive and not known or held out as a partner.

**Silent Partner.** Inactive (but may be known to be a partner).

**Nominal Partner (Partner by Estoppel).** Not a true partner in any sense, not being a party to the partnership agreement. However, a nominal partner holds him or herself out as a partner, or permits others to make such representation by the use of his/her name or otherwise. Therefore, a nominal partner is liable as if he or she were a partner to third persons who have given credit to the actual or supposed truth of such representation.

**Subpartner.** One who, not being a member of the partnership, contracts with one of the partners in reference to participation in the interest of such partner in the firm's business and profits.

**Limited or Special Partner.** Assuming compliance with the statutory formalities, the limited partner risks only his or her agreed investment in the business. As long as he or she does not participate in the management and control of the enterprise or in the conduct of its business, the limited partner is generally not subject to the same liabilities as a general partner.

### Advantages of the Partnership

**Ease of formation.** Legal informalities and expenses are few compared with the requirements for creation of a corporation.

**Direct rewards.** Partners are motivated to apply their best abilities by direct sharing of the profits.



**Growth and performance facilitated.** In a partnership, it is often possible to obtain more capital and a better range of skills than in a sole proprietorship.

**Flexibility.** A partnership may be relatively more flexible in the decision making process than in a corporation. But, it may be less so than in a sole proprietorship.

**Relative freedom from government control and special taxation.**

#### **Disadvantages of a Partnership**

**Unlimited liability of at least one partner.** Insurance considerations such as those mentioned in the proprietorship section apply here also.

**Unstable life.** Elimination of any partner constitutes automatic dissolution of partnership. However, operation of the business can continue based on the right of survivorship and possible creation of a new partnership. Partnership insurance might be considered.

**Relative difficulty in obtaining large sums of capital.** This is particularly true of long term financing when compared to a corporation. However, by using individual partners' assets, opportunities are probably greater than in a proprietorship.

**Firm bound by the acts of just one partner as agent.**

**Difficulty of disposing of partnership interest.** The buying out of a partner may be difficult unless specifically arranged for in the written agreement.

## **The Corporation**

The corporation is by far the most complex of the three business structures. For the purpose of this *Aid*, we shall discuss only the general characteristics of the corporation, not its intricacies.

**As defined by Chief Justice Marshall's famous decision in 1819,** a corporation "is an artificial being, invisible, intangible, and existing only in contemplation of the law." In other words, a corporation is a distinct legal entity, distinct from the individuals who own it.

#### **Formation of the Corporation**

A corporation usually is formed by the authority of a state government. Corporations which do business in

4

more than one state must comply with the Federal laws regarding interstate commerce and with the state laws, which may vary considerably.

The procedure ordinarily required to form a corporation is that, first, subscriptions for capital stock must be taken and a tentative organization created. Then, approval must be obtained from the Secretary of State in the state in which the corporation is to be formed. This approval is in the form of a charter for the corporation, stating the powers and limitations of the particular enterprise.

#### **Advantages of the Corporation**

**Limitations of the stockholder's liability to a fixed amount of investment.** However, do not confuse corporate liability with appropriate liability insurance considerations.

**Ownership is readily transferable.**

**Separate legal existence.**

**Stability and relative permanence of existence.** For example, in the case of illness, death, or other cause for loss of a principal (officer or owner), the corporation continues to exist and do business.

**Relative ease of securing capital in large amounts and from many investors.** Capital may be acquired through the issuance of various stocks and long term bonds. There is relative ease in securing long term financing from lending institutions by taking advantage of corporate assets and often personal assets of stockholders and principals of guarantors (Personal guarantees are very often required by lenders.)

**Delegated authority.** Centralized control is secured when owners delegate authority to hired managers, although they are often one and the same.

**The ability of the corporation to draw on the expertise and skills of more than one individual.**

#### **Disadvantages of the Corporation**

**Activities limited by the charter and by various laws.** However, some states do allow very broad charters.

**Manipulation.** Minority stockholders are sometimes exploited.

**Extensive government regulations and required local, state, and federal reports.**



**Less incentive if manager does not share in profits.**

**Expense of forming a corporation.**

**Double tax - income tax on corporate net income (profit) and on individual salary and dividends.\***

\*You should be aware, also, of the possibility of selecting subchapter S status (IRC 1371-1379). The purpose of subchapter S is to permit a "small business corporation" to have its income taxed to the shareholders as if the corporation were a partnership. One objective is to overcome the double tax feature of our system of taxing corporate income and stockholder dividends. Another purpose is to permit the shareholders to have the benefit of offsetting business losses incurred by the corporation against the income of the shareholders.

Among the conditions for the making and maintenance of subchapter S election are that the corporation have ten or fewer shareholders, all of whom are individuals or estates, that there be no nonresident alien shareholders, that there be only one class of outstanding stock, that all shareholders consent to the election, and that a specific portion of the corporation's receipts be derived from active business rather than enumerated passive investments. No limit is placed on the size of the corporation's income and assets.

In summary, review the following eight questions:

1. What is the size of the risk? That is, what is the amount of the investors' liability for debts and taxes?
2. What would the continuity (life) of the firm be if something happened to the principal or principals?
3. What legal structure would insure the greatest adaptability of administration for the firm?
4. What are the influence of applicable laws?
5. What are the possibilities of attracting additional capital?
6. What are the needs for and possibilities of attracting additional expertise?
7. What are the costs and procedures in starting?
8. What is the ultimate goal and purpose of the enterprise, and which legal structure can best serve its purposes?

The small businessowner is required to wear many hats, but none can be expected to be a lawyer, certified public accountant, marketing specialist, production engineer, environmental specialist, etc. Therefore, you should get the facts before making decisions. When necessary and if possible, you should also get professional counsel to help you avoid misunderstanding technical or legal issues and avoid making bad decisions and false starts that require backtracking and added expense. This is especially true when you are deciding what legal form to adopt. This *Aid* has presented an introduction to the options and guidelines for selecting the best legal structure for your business.



**U.S. Small Business Administration**  
Office of  
Business Development

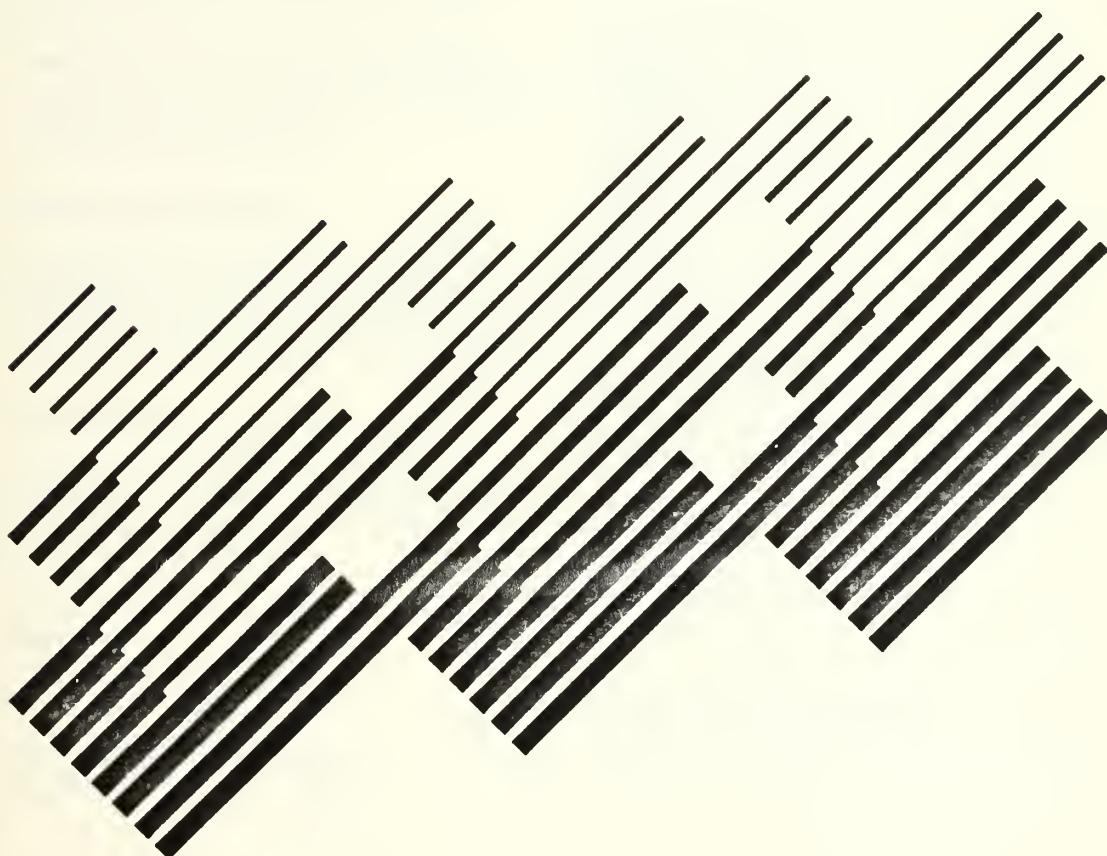
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**SBA**

# **Feasibility Checklist for Starting a Small Business**

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**And By Dr. Danny R. Arnold**  
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## Summary

This AID is a checklist for the owner/manager of a small business enterprise or for one contemplating going into business for the first time. The questions concentrate on areas you must consider seriously to determine if your idea represents a real business opportunity and if you really know what you are getting into. You can use it to evaluate a completely new venture proposal or an apparent opportunity in your existing business.

Perhaps the most crucial problem you will face after expressing an interest in starting a new business or capitalizing on an apparent opportunity in your existing business will be determining the feasibility of your idea. Getting into the right business at the right time is simple advice, but advice that is extremely difficult to implement. The high failure rate of new businesses and products indicates that very few ideas result in successful business ventures, even when introduced by well established firms. Too many entrepreneurs strike out on a business venture so convinced of its merits that they fail to thoroughly evaluate its potential.

This checklist should be useful to you in evaluating a business idea. It is designed to help you screen out ideas that are likely to fail before you invest extensive time, money, and effort in them.

## Preliminary Analysis

A feasibility study involves gathering, analyzing and evaluating information with the purpose of answering the question: "Should I go into this business?" Answering this question involves first a preliminary assessment of both personal and project considerations.

## General Personal Considerations

The first seven questions ask you to do a little introspection. Are your personality characteristics such that you can both adapt to and enjoy small business ownership/management?

- |  | Yes   | No    |
|--|-------|-------|
| 1. Do you like to make your own decisions?     | <hr/> | <hr/> |
| 2. Do you enjoy competition?                   | <hr/> | <hr/> |
| 3. Do you have will power and self-discipline? | <hr/> | <hr/> |
| 4. Do you plan ahead?                          | <hr/> | <hr/> |
| 5. Do you get things done on time?             | <hr/> | <hr/> |
| 6. Can you take advise from others?            | <hr/> | <hr/> |

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- |  | Yes   | No    |
|--|-------|-------|
| 7. Are you adaptable to changing conditions?   | <hr/> | <hr/> |
| The next series of questions stress the physical, emotional, and financial strains of a new business.  |       |       |
| 8. Do you understand that owning your own business may entail working 12 to 16 hours a day, probably six days a week, and maybe on holidays? | <hr/> | <hr/> |
| 9. Do you have the physical stamina to handle a business?  | <hr/> | <hr/> |
| 10. Do you have the emotional strength to withstand the strain?  | <hr/> | <hr/> |
| 11. Are you prepared to lower your standard of living for several months or years?   | <hr/> | <hr/> |
| 12. Are you prepared to lose your savings?   | <hr/> | <hr/> |

## Specific Personal Considerations

- |   |       |       |
|---|-------|-------|
| 1. Do you know which skills and areas of expertise are critical to the success of your project? | <hr/> | <hr/> |
| 2. Do you have these skills?  | <hr/> | <hr/> |
| 3. Does your idea effectively utilize your own skills and abilities?                            | <hr/> | <hr/> |
| 4. Can you find personnel that have the expertise you lack?                                     | <hr/> | <hr/> |
| 5. Do you know why you are considering this project?  | <hr/> | <hr/> |
| 6. Will your project effectively meet your career aspirations?                                  | <hr/> | <hr/> |

The next three questions emphasize the point that very few people can claim expertise in all phases of a feasibility study. You should realize your personal limitations and seek appropriate assistance where necessary (i.e., marketing, legal, financial).

- |   |       |       |
|---|-------|-------|
| 7. Do you have the ability to perform the feasibility study?        | <hr/> | <hr/> |
| 8. Do you have the time to perform the feasibility study?           | <hr/> | <hr/> |
| 9. Do you have the money to pay to have the feasibility study done? | <hr/> | <hr/> |

## General Project Description

- |   |       |
|---|-------|
| 1. Briefly describe the business you want to enter. | <hr/> |
|---|-------|



- |   |  |
|---|--|
| <p>2. List the products or services you want to sell. _____</p> <p>3. Describe who will use your products/services. _____</p> <p>4. Why would someone buy your product/service? _____</p> <p>5. What kind of location do you need in terms of type of neighborhood, traffic count, nearby firms? _____</p> <p>6. List your product/services suppliers. _____</p> <p>7. List your major competitors—those who sell or provide like products/services _____</p> <p>8. List the labor and staff you require to provide your products/services. _____</p> | Yes      No<br><hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> |
|---|--|

## Requirements for Success

To determine whether your idea meets the basic requirements for a successful new project, you must be able to answer at least one of the following questions with a "yes."

- |   |                                  |
|---|----------------------------------|
| <p>1. Does the product/service/business serve a presently unserved need? _____</p> <p>2. Does the product/service/business serve an existing market in which demand exceeds supply? _____</p> <p>3. Can the product/service/business successfully compete with existing competition because of an "advantageous situation," such as better price, location? _____</p> | Yes      No<br><hr/> <hr/> <hr/> |
|---|----------------------------------|

## Major Flaws

A "Yes" response to questions such as the following would indicate that the idea has little chance for success.

- |   |                   |
|---|-------------------|
| <p>1. Are there any causes (i.e., restrictions, monopolies, shortages) that make any of the required factors of production unavailable (i.e., unreasonable cost, scarce skills, energy, material, equipment, processes, technology, or personnel)? _____</p> <p>2. Are capital requirements for entry or continuing operations excessive? _____</p> <p>3. Is adequate financing hard to obtain? _____</p> | <hr/> <hr/> <hr/> |
|---|-------------------|

- |  |             |
|--|-------------|
| <p>4. Are there potential detrimental environmental effects? _____</p> <p>5. Are there factors that prevent effective marketing? _____</p> | <hr/> <hr/> |
|--|-------------|

## Desired Income

The following questions should remind you that you must seek both a return on your investment in your own business as well as a reasonable salary for the time you spend in operating that business.

- |  |   |
|--|---|
| <p>1. How much income do you desire? _____</p> <p>2. Are you prepared to earn less income in the first 1-3 years? _____</p> <p>3. What minimum income do you require? _____</p> <p>4. What financial investment will be required for your business? _____</p> <p>5. How much could you earn by investing this money? _____</p> <p>6. How much could you earn by working for someone else? _____</p> <p>7. Add the amounts in 5 and 6. If this income is greater than what you can realistically expect from your business, are you prepared to forego this additional income just to be your own boss with only the prospects of more substantial profit/income in future years? _____</p> <p>8. What is the average return on investment for a business of your type? _____</p> | <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> |
|--|---|

## Preliminary Income Statement

Besides return on investment, you need to know the income and expenses for your business. You show profit or loss and derive operating ratios on the income statement. Dollars are the (actual, estimated, or industry average) amounts for income and expense categories. Operating ratios are expressed as percentages of net sales and show relationships of expenses and net sales.

For instance \$50,000 in net sales equals 100% of sales income (revenue). Net profit after taxes equals 3.14% of net sales. The hypothetical "X" industry average after tax net profit might be 5% in a given year for firms with \$50,000 in net sales. First you estimate or forecast income (revenue) and expense dollars and ratios for your business. Then compare your estimated or actual performance with your industry average. Analyze differences to see why you are doing better or worse than the competition or why your venture does or doesn't look like it will float.



These basic financial statistics are generally available for most businesses from trade and industry associations, government agencies, universities, and private companies and banks (Dun & Bradstreet, Robert Morris Associates, Accounting Corporation of America, National Cash Register Company, Bank of America, Federal Trade Commission, and Securities and Exchange Commission).

Forecast your own income statement. Do not be influenced by industry figures. Your estimates must be as accurate as possible or else you will have a false impression.

1. What is the normal markup in this line of business, i.e., the dollar difference between the cost of goods sold and sales, expressed as a percentage of sales? \_\_\_\_\_
2. What is the average cost of goods sold percentage of sales? \_\_\_\_\_
3. What is the average inventory turnover, i.e., the number of times the average inventory is sold each year? \_\_\_\_\_
4. What is the average gross profit as a percentage of sales? \_\_\_\_\_
5. What are the average expenses as a percentage of sales? \_\_\_\_\_
6. What is the average net profit as a percent of sales? \_\_\_\_\_
  
7. Take the preceding figures and work backwards using a standard income statement format and determine the level of sales necessary to support your desired income level. \_\_\_\_\_
8. From an objective, practical standpoint, is this level of sales, expenses and profit attainable? \_\_\_\_\_

ANY SMALL BUSINESS, INC. Condensed Hypothetical Income Statement For year ending December 31, 19____		
Item	Amount	Ratio Percent
Gross sales .....	\$773,888	
Less returns, allowances, and cash discounts ....	14,872	
Net sales .....	\$759,016	100.00
Cost of goods sold.....	589,392	77.65
Gross profit on sales .....	\$169,624	22.35
Selling expenses .....	41,916	5.52
Administrative expenses .....	28,010	3.69
General expenses .....	50,030	6.59
Financial expenses .....	5,248	0.69
Total expenses.....	125,204	16.50
Operating profit.....	44,420	5.85
Extraordinary expenses .....	1,200	0.16
Net profit before taxes .....	\$43,220	5.69
Federal, state, and local taxes.....	19,542	2.57
Net profit after taxes.....	\$23,678	3.12

## Market Analysis

The primary objective of a market analysis is to arrive at a realistic projection of sales. After answering the following questions you will be in a better position to answer question eight immediately above.

### Population

1. Define the geographical areas from which you can realistically expect to draw customers. \_\_\_\_\_
2. What is the population of these areas? \_\_\_\_\_
3. What do you know about the population growth trend in these areas? \_\_\_\_\_
4. What is the average family size? \_\_\_\_\_
5. What is the age distribution? \_\_\_\_\_
6. What is the per capita income? \_\_\_\_\_
7. What are the consumers' attitudes toward business like yours? \_\_\_\_\_
8. What do you know about consumer shopping and spending patterns relative to your type of business? \_\_\_\_\_
9. Is the price of your product/service especially important to your target market? \_\_\_\_\_
10. Can you appeal to the entire market? \_\_\_\_\_
11. If you appeal to only a market segment, is it large enough to be profitable? \_\_\_\_\_

### Competition

1. Who are your major competitors? \_\_\_\_\_
2. What are the major strengths of each? \_\_\_\_\_
3. What are the major weaknesses of each? \_\_\_\_\_
4. Are you familiar with the following factors concerning your competitors:  
Price structure? \_\_\_\_\_  
Product lines (quality, breadth, width)? \_\_\_\_\_  
Location? \_\_\_\_\_  
Promotional activities? \_\_\_\_\_  
Sources of supply? \_\_\_\_\_  
Image from a consumer's viewpoint? \_\_\_\_\_
5. Do you know of any new competitors? \_\_\_\_\_
6. Do you know of any competitor's plans for expansion? \_\_\_\_\_
7. Have any firms of your type gone out of business lately? \_\_\_\_\_
8. If so, why? \_\_\_\_\_
9. Do you know the sales and market share of each competitor? \_\_\_\_\_
10. Do you know whether the sales and market share of each competitor are increasing, decreasing, or stable? \_\_\_\_\_
11. Do you know the profit levels of each competitor? \_\_\_\_\_



12. Are your competitors' profits increasing, decreasing, or stable? _____	Yes	No
13. Can you compete with your competition? _____		
<b>Sales</b>		
1. Determine the total sales volume in your market area. _____		
2. How accurate do you think your forecast of total sales is? _____		
3. Did you base your forecast on concrete data? _____		
4. Is the estimated sales figure "normal" for your market area? _____		
5. Is the sales per square foot for your competitors above the normal average? _____		
6. Are there conditions, or trends, that could change your forecast of total sales? _____		
7. Do you expect to carry items in inventory from season to season, or do you plan to mark down products occasionally to eliminate inventories? If you do not carry over inventory, have you adequately considered the effect of <b>mark-downs</b> in your pricing? (Your gross profits margin may be too low.) _____		
8. How do you plan to advertise and promote your product/service/business? _____		
9. Forecast the share of the total market that you can realistically expect—as a dollar amount and as a percentage of your market. _____		
10. Are you sure that you can create enough competitive advantages to achieve the market share in your forecast of the previous question? _____		
11. Is your forecast of dollar sales greater than the sales amount needed to guarantee your desired or minimum income? _____		
12. Have you been optimistic or pessimistic in your forecast of sales? _____		
13. Do you need to hire an expert to refine the sales forecast? _____		
14. Are you willing to hire an expert to refine the sales forecast? _____		
<b>Supply</b>	Yes	No
1. Can you make a list of every item of inventory and operating supplies needed? _____		
2. Do you know the quantity, quality, technical specifications, and price ranges desired? _____		
3. Do you know the name and location of each potential source of supply? _____		
4. Do you know the price ranges available for each product from each supplier? _____		
5. Do you know about the delivery schedules for each supplier? _____		
6. Do you know the sales terms of each supplier? _____		
7. Do you know the credit terms of each supplier? _____		
8. Do you know the financial condition of each supplier? _____		
9. Is there a risk of shortage for any critical materials or merchandise? _____		
10. Are you aware of which supplies have an advantage relative to transportation costs? _____		
11. Will the price available allow you to achieve an adequate markup? _____		
<b>Expenses</b>		
1. Do you know what your expenses will be for: rent, wages, insurance, utilities, advertising, interest, etc? _____		
2. Do you need to know which expenses are Direct, Indirect, or Fixed? _____		
3. Do you know how much your overhead will be? _____		
4. Do you know how much your selling expenses will be? _____		
<b>Miscellaneous</b>		
1. Are you aware of the major risks associated with your product? Service? Business? _____		
2. Can you minimize any of these major risks? _____		
3. Are there major risks beyond your control? _____		
4. Can these risks bankrupt you? (fatal flaws) _____		
<b>Venture Feasibility</b>		
1. Are there any major questions remaining about your proposed venture? _____		
2. Do the above questions arise because of a lack of data? _____		
3. Do the above questions arise because of a lack of management skills? _____		
4. Do the above questions arise because of a "fatal flaw" in your idea? _____		
5. Can you obtain the additional data needed? _____		
6. Can you obtain the additional managerial skills needed? _____		
7. Are you aware that there is less than a 50-50 chance that you will be in business two years from now? _____		



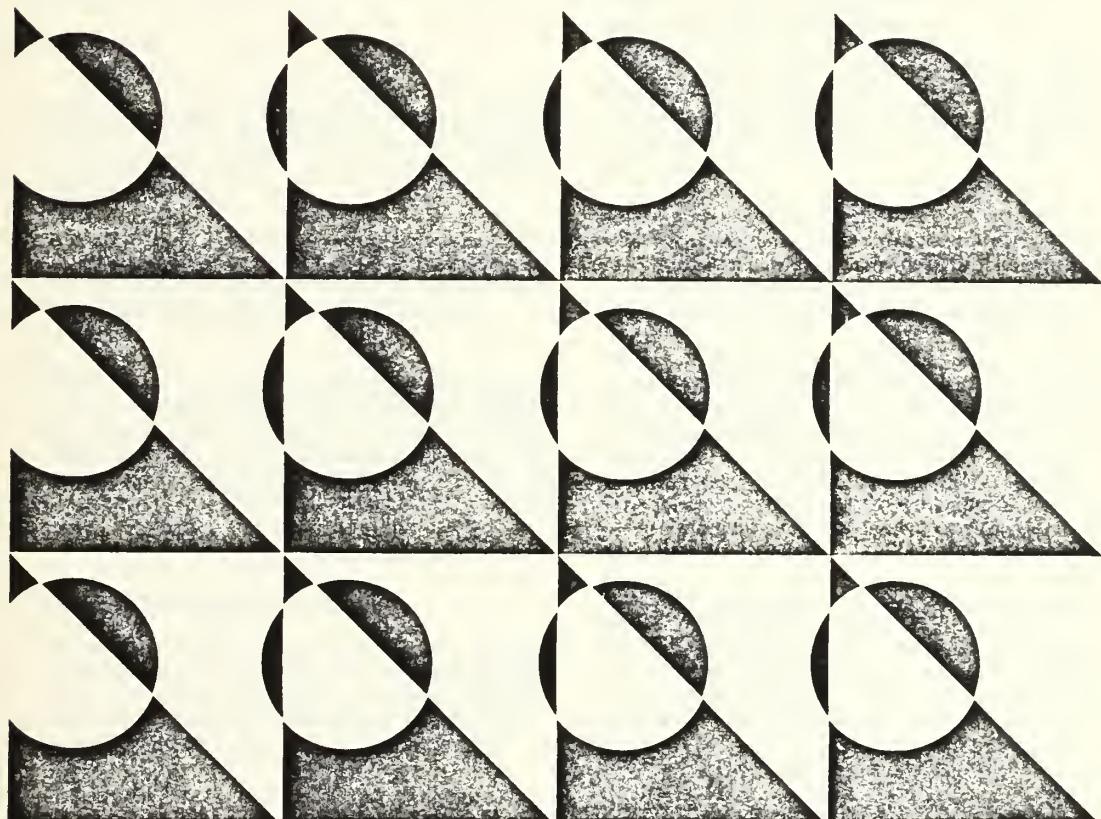
**U.S. Small Business Administration**  
Management Assistance  
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Management Aids  
Number 1.011

**SBA**

## Analyze Your Records to Reduce Costs

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## **Summary**

**Increasing profits through cost reduction must be based on the concept of an organized, planned program. Unless adequate records are maintained through a proper accounting system, there can be no basis for ascertaining and analyzing costs.**

**Cost reduction IS NOT simply attempting to slash any and all expenses unmethodically. The owner-manager must understand the nature of expenses and how expenses inter-relate with sales, inventories, cost of goods sold, gross profits, and net profits.**

**Cost reduction does not mean only the reduction of specific expenses. You can achieve greater profits through more efficient use of the expense dollar. Some of the ways you do this are by increasing the average sale per customer, by effectively using display space and thereby increasing sales volume per square foot, by getting a larger return for your advertising and sales promotion dollar, and by improving your internal methods and procedures.**

Profit is in danger when good merchandising and cost control do not go hand in hand. A big sales volume does not necessarily mean a big profit, as one small retailer, Carl Jones\*, learned.

Jone's pride was stocking stylish and well assorted lines of merchandise. Each year, sales volume increased. This increase was attributed to good merchandising which Jones felt took care of the steady rise in expenses.

But Mr. Jones began to have doubts when he found it necessary to get bank loans more often than had been his practice. When he discussed the problem with his banker, Jones was advised to check expenses. As the banker said, "A large and increasing sales volume often creates the appearance of prosperity while behind-the-scene expenses are eating up the profit."

## **Paying The Right Price**

Your goal should be to pay the right price for prosperity. Determining that price for your operation goes beyond knowing what your expenses are. Reducing expenses to increase profit requires you to obtain the most efficient use of the expense dollar.

\*Names are fictitious in Aids.

Look, for example, at the payroll expense. Salesclerks are paid to sell goods, and their productivity is the key to reducing the payroll cost.

If you train a salesclerk to make multiple sales at higher unit prices, you increase productivity and your profits without adding dollars to your payroll expenses. Or if four salesclerks can be trained to sell the amount previously sold by seven, the payroll can be cut by three persons.

An understanding of the worth of each expense item comes from experience and an analysis of records. Adequate records tell what has happened. Their analysis provide facts which can help you set realistic cost and profit goals. When you attain these goals, you are paying the right price for your store's prosperity.

## **Analyze Your Expenses**

Sometimes you cannot cut an expense item. But you can get more from it and thus increase your profits. In analyzing your expenses, you should use percentages rather than actual dollar amounts.

For example, if you increase sales and keep the dollar amount of an expense the same, you have decreased that expense as a percentage of sales. When you decrease your cost percentage, you increase your percentage of profit.

On the other hand, if your sales volume remains the same, you can increase the percentage of profit by reducing a specific item of expense. Your goal, of course, is to do both: to decrease specific expenses and increase their productive worth at the same time.

Before you can determine whether cutting expenses will increase profits, you need information about your operation. This information can be obtained only if you have an adequate recordkeeping system. Such records will provide the figures to prepare a profit and loss statement (preferably monthly for most retail businesses), a budget, break-even calculations, and evaluations of your operating ratios compared with those of similar types of business.

**Break-even.** A useful method for making expense comparisons is break-even analysis. Break-even is the point at which gross profit equals expenses. In a business year, it is the time at which your sales volume has become sufficient to enable your over-all operation to start showing a profit. The two condensed profit and loss statements, in the accompanying example, illustrate the point. In statement "A", the sales-volume is at the break-even point and no profit is made. In Statement



"B" for the same store, the sales volume is beyond the break-even point and a profit is shown. In the two statements, the percentage factors are the same except for fixed expenses, total expenses, and operating profit.

	<b>A</b>			<b>B</b>
	Break-Even Amount	Percent of Sales	Profit Amount	Percent of Sales
Sales.....	<b>\$500,000</b>	<b>100</b>	<b>\$600,000</b>	<b>100</b>
Cost of Sales .....	<b>300,000</b>	<b>60</b>	<b>360,000</b>	<b>60</b>
Gross Profit.....	<b>200,000</b>	<b>40</b>	<b>240,000</b>	<b>40</b>
Operating Expenses				
Fixed .....	150,000	30	150,000	25
Variable.....	50,000	10	60,000	10
Total.....	<b>200,000</b>	<b>40</b>	<b>210,000</b>	<b>35</b>
Operating Profit .....	<b>\$ NONE</b>	<b>0</b>	<b>\$ 30,000</b>	<b>5</b>

As shown in the example, once your sales volume reaches the break-even point, your fixed expenses are covered. Beyond the break-even point, every dollar of sales should earn you an equivalent additional profit percentage.

It is important to remember that once sales pass the break-even point, the fixed expenses percentage goes down as the sales volume goes up. Also the operating profit percentage increases at the same rate as the percentage rate for fixed expenses decreases—provided, of course, that variable expenses are kept in line. In the illustration, fixed expenses in Statement "B" decreased by 5 percent and operating profit increased by 5 percent.

## Locating Reducible Expenses

Your profit and loss (or income) statement provides a summary of expense information and is the focal point in locating expenses that can be cut. Therefore, the information should be as current as possible. As a report of what has already been spent, a P and L statement alerts you to expense items that bear watching in the present business period. If you get a P and L statement only at the end of the year, you should consider having one prepared more often. At the end of each quarter might be often enough for some firms. Ideally, you can get the most recent information from a monthly P and L.

Regardless of the frequency, for the most information, two P and L statements should be prepared. One statement should report the sales, expenses, profit and/or loss of your operations cumulatively for the current business year to date. The other should report on the same items for the last complete month or quarter. Each of the statements should also carry the following

information: (1) this year's figures and each item as a percentage of sales, (2) last year's figures and the percentages, (3) the difference between last year and this year—over or under, (4) budgeted figures and the respective percentages, (5) the difference between this year and the budgeted figures—over and under, (6) average percentages for your line of business (industry operating ratio) when available, and (7) the difference between your annual percentages and the industry ratios—under or over.

This information allows you to locate expense variation in three ways: (1) by comparing this year to last year, (2) by comparing expenses to your own budgeted figures, and (3) by comparing your percentages to the operating ratios for your line of business.

The important basis for comparison is the percentage figure. It represents a common denominator for all three methods. When you have indicated the percentage variations, you should then study the dollar amounts to determine what kind of corrective action is needed.

Because your cost cutting will come largely from variable expenses, you should make sure that they are flagged on your P and L statements. Variable expenses are those which fluctuate with the increase or decrease of sales volume. Some of them are: advertising, delivery, wrapping supplies, sales salaries, commissions, and payroll taxes. Fixed expenses are those which stay the same regardless of sales volume. Among them are: your salary, salaries for permanent non-selling employees (for example, the bookkeeper), depreciation, rent, and utilities.

## Taking Action

When you have located a problem expense area, the next step obviously is to reduce that cost so as to increase your profit. A key to the effectiveness of your cost-cutting action is the worth of the various expenditures.

As long as you know the worth of your expenditures, you can profit by making small improvements in expenses. Keep an open eye and an open mind. It is better to do a spot analysis once a month than to wait several months and then do a detailed study.

Take action as soon as possible. You can refine your cost-cutting action as you go along.

Be persistent. Sometimes results may be slower than you might like. Keep in mind that only persistent analysis of your records and constant action can keep expenses from eating up profit.



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## **Budgeting in a Small Service Firm**

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## Summary

**Budgeting is a tool for dealing with the future. It helps you turn expectations into reality.**

**An increase in profit should be the first consideration when you think about the prospects for your small service business in the next year. Working up a budget helps you to determine whether or not your profit goal is within reach.**

**When the figures are all together, you have answers to questions such as: What sales will be needed to achieve the desired profit? What fixed expenses will be necessary to support these sales? What variable expenses will be incurred in producing the services?**

**Because small business is not a cut-and-dried affair, the first budget often will uncover problems and suggest choices. Working up additional budgets will help you decide what changes to make in order to have a workable plan for next year.**

**Many owner-managers run their businesses without a planned goal. In trying to survive from week to week and from month to month, such owner-managers overlook an important management tool—budgeting. Whether the plan is for next year, for the next 3 years, or for the next 5 years, budgeting can help just as a map helps you to keep on the right road.**

## Why Budget

A budget is a plan that enables you to set a goal and list the steps which are necessary to reach that goal. Thus, a budget helps you think about what you want your business to do in the future. By planning, you are in a better position to act to prevent crises.

In its simplest form a budget is a detailed plan of future receipts and expenditures—a projected profit and loss statement. Thus once the period for which you have budgeted is completed, you can compare actual results with anticipated goals. If some of your expenses, for example, are higher than you expected, you can start looking for ways to cut them. Conversely, if you have fallen short of your goal, you may want to look for ways to increase your income.

Budget makers can start either with a forecast of sales and work down or with a forecast of profits and work up. Most small service businesses use the latter method. In other words, you decide what profit you want to make and then list the expenses that you will incur in order to make that predetermined profit.

2

## A Plan For Increased Profit

Before you can use a budget as a plan for increased profit, you have to be sure that your present profit is what it should be. In a service business, the year-end profit should be large enough to make a return on your investment and a return on your own work—pay you a salary.

**Value Of Owner's Service.** Skilled crafts people who own service businesses are kidding themselves if their firms' profits are less than they can earn working for someone else. Your net profit after taxes should be at least as much as you can earn if you worked at your trade for a weekly pay check.

**Return On Investment.** The year-end profit is too low if it does not also include a return on the owner-manager's investment. That investment includes the money you put into the firm when you started it and the profit of prior years which you left in the firm—retained earnings. You should check to be sure that the rate of return on your investment is what it should be. Your trade association should be able to provide guidelines about the rate of return on investment in your line of business. Your accountant and banker are also sources of help.

**Your Targeted Income.** After you know what you made last year, you can set a profit goal for next year. Be sure that your goal includes a return on your services and a return on your investment. Your goal should also include an amount for State and Federal taxes. For example, if you want to make \$10,000 after taxes, your goal before taxes should be about \$13,333. You have to add this \$3,333 to take care of State and Federal taxes. Keep in mind that the larger your goal, the larger the amount which will have to be added to account for taxes. Your accountant can help you determine that amount.

## Can You Reach The Goal

Once you have decided on your profit target, the next step in preparing a budget is to determine whether you can achieve it. To do this, you must project your fixed costs and your variable costs. From these three figures—profit, fixed expenses, and variable expenses—you can determine your "hoped for" total income.

In gathering figures, keep in mind that without accurate information planning becomes guessing. The owner-manager who has never budgeted should talk with an accountant about a recordkeeping system. Changes may be needed to provide the necessary budget information. It may be that your present system does not break costs down into fixed and variable expenses, or it may be that



you need to have a profit and loss (or income) statement at more frequent intervals to determine the seasonal fluctuations of your revenues and expenses.

**Fixed Expenses.** Regardless of sales, fixed expenses stay the same. Several examples of fixed expenses are insurance, rent, taxes on property, wages paid to salaried employees, depreciation of equipment, interest on borrowed money, building maintenance costs, office salaries, and office expenses.

**Variable Expenses** This type of expense varies with sales. In some service businesses, the cost of labor is the biggest factor. Sales commissions, payroll taxes, insurance, advertising, and delivery expenses are other examples of variable expenses.

**Determine Your Expected Service Income** Your expected service income contribution is the difference between sales and the variable expenses that are necessary to produce these sales. When this difference equals fixed expenses and the desired profit, you have a workable budget.

(1) the raise she intended to give the receptionist, (2) a change in amount of interest, and (3) a change in her insurance expense.

She estimated that her fixed expenses for next year would be \$11,000.

**Determining Variable Expenses.** In Mrs. Doe's beauty shop, the variable expenses—those that vary with sales—are cost of cosmetics sold, shop supplies, payroll taxes and costs, utilities (water and electricity), about one-half of laundry and shop maintenance, and operator's salaries. These salaries are variable because each operator receives one-half of the total price charged the customer.

When determining variable expenses, Mrs. Doe uses her trade journals for information on budgeted percentages. For budgeting purposes, all costs are expressed as a percentage of the sales dollar. In her case, the percentages are: beauty shop supplies 10; laundry, including uniforms 3; water and variable utilities 1; and payroll costs 5.

## Lucy's Beauty Shop

Lucy's Beauty Shop\* illustrates the principals of budgeting in a small service business. The owner-manager is Mrs. Lucy Doe. The shop's income is from two sources: (1) from beauty services which are performed by three operators and (2) from cosmetics and perfumes which are sold by the receptionist. The receptionist also answers the telephone, keeps the shop's daily records, and prepares the checks for Mrs. Doe to sign.

**Targeted Income** In making a budget, Mrs. Doe decided that she wanted to increase her net profit after taxes. She set the goals at \$10,000 for net profit after taxes. This figure meant that the shop's profit before taxes had to be about \$13,333 because she figured that her taxes would amount to about \$3,333.

This goal was an ambitious one because her previous year's net profit before taxes was \$8,390. For details on that year see page four. "Lucy's Beauty Shop—Profit and Loss Statement."

**Determining Fixed Expenses.** As shown in the table, "Lucy's Beauty Shop—Profit and Loss Statement," the shop's fixed expense items are: depreciation of equipment, receptionist's salary, insurance, rent, interest on equipment obligations, and utilities (heat and air conditioning). In addition, about one half of the laundry and shop maintenance expense is fixed. In budgeting her fixed expenses for next year, Mrs. Doe took into account:

\*Names in Aids are Fictitious



**Lucy's Beauty Shop  
Profit And Loss Statement  
For the Year Ended December 31, 19\_\_\_\_**

<b>Revenue:</b>				
Merchandise				\$12,000
Beauty Shop Service				42,000
<b>Total Revenue</b>				<b>\$54,000</b>
<b>Cost of Merchandise Sold</b>				<b>6,000</b>
 <b>Gross Margin</b>				 <b>\$48,000</b>
<b>Expenses</b>	<b>Variables</b>	<b>Fixed</b>	<b>Total</b>	
Depreciation		300	300	
Salaries and wages	21,000	2,700	23,700	
Supplies	4,200		4,200	
Insurance		110	110	
Rent		4,800	4,800	
Payroll taxes and costs	2,370		2,370	
Interest		250	250	
Utilities	420	1,000	1,420	
Laundry and Shop maintenance	1,260	1,200	2,460	
	<u>29,250</u>	<u>10,360</u>		
<b>Net Income Before Taxes</b>				<b>\$39,610</b>
				<b><u>\$8,390</u></b>

She estimates her total payroll costs at 5 percent of gross revenue from service or 10 percent of salaries. Payroll taxes both—State and Federal—account for 7.9 percent of the 10 percent, and payment's for workers' compensation and other employee insurance account for 2.1 percent.

**Determining Expected Service Income.** The next step in preparing a budget for Lucy's Beauty Shop is to determine the expected service income contribution. The basis for estimating this income for next year is the average revenue for each operator's appointment with one customer. This figure is \$4. See the following table, "Service Income Contribution."

One half of the \$4 belongs to the operator. Other variable expenses take 76 cents. Thus, from each \$4 unit of services that is sold, \$1.24 is left for service income contribution.

The service revenue for 12 months is shown in the table, "Determination of Total Service Contribution." Mrs. Doe arrived at these estimates as follows:

2. The shop's income from each operator is \$30 a day (15 times \$2).
3. Each operator works 5 days a week.
4. Each operator contributes \$630 a month to the shop's income (21 days times \$30).

**Service Income Contribution  
Expressed as a Percent of Sales Dollar**

<b>Average Service Revenue</b>	\$4.00	100%
<b>Variable Expenses</b>		
Operator salaries	\$2.00	50%
Beauty supplies	.40	10%
Laundry and uniforms	.12	3%
Water	.04	1%
Payroll costs	.20	5%
<b>Total Variable Expenses</b>	<u>2.76</u>	<u>69%</u>
 <b>Income Contribution From Services</b>	 <b>\$1.24</b>	 <b>31%</b>

1. From the appointment book, she learned that each operator averages 15 appointments a day.



On this \$630, the shop clears \$390.60 because 76 cents of each \$2 that the shop receives from an operator's work goes for variable expenses (see the table, "Service Income Contribution").

The shop's cosmetic sales contribute a net revenue of 50 cents on the sales dollar. Mrs. Doe estimated, based on past experience, that she could get a 50 percent increase in the sales of cosmetics without additional advertising.

**Comparing Revenue and Cost.** After Mrs. Doe determines her variable expenses, fixed expenses, and the service income contribution, she is ready to test her budget. She does this by adding her total fixed expenses of \$11,000 and the desired gross profit of \$13,333. This total comes to \$24,333.

But her estimated service revenue (see the table, "Determination of Total Service Contribution,") is only \$23,061. It will not cover her fixed expenses and desired profit. Resources will be about \$1,300 short of the desired goal.

#### Determination Of Total Service Contribution

Revenue Per Operator For The Year (\$1,260 per month x 12 months)	<u>\$15,120</u>
Service Income Contribution Per Operator (\$390.60 x 12 months)	<u>4,687*</u>
Total Service Contribution From Beauty Shop (3 operators x \$4,687)	14,061
From Cosmetic Sales (\$18,000 x 50%)	<u>9,000</u>
Total Service Contribution Based On Present Outlook	<u><u>\$23,061</u></u>

\*Figures are rounded to the nearest dollar.

## Where Can She Go?

Because resources are not enough to cover fixed expenses and the desired profit, Mrs. Doe has to adjust her budget. She can go in at least three directions. One possibility is to add another operator. Another is to try to increase cosmetic sales. A third solution is to reduce her expected profit. In order to decide what to do, Mrs. Doe needs answers to several questions about each possibility. She may have to work up several tentative budgets to determine what to do.

**Add Another Operator.** This possibility poses the following questions: Is the relationship between fixed expenses and revenue in line with industry trends? Is there space for an additional booth? What additional fixed expenses will be incurred? Can another operator be

kept busy? If so, the additional revenue can help to offset Mrs. Doe's rent which is slightly higher than the average for her line of business. That average is 10 percent of gross beauty service income. The shop has sufficient space for another booth. However, if a booth is added, fixed expenses will increase because equipment for the new booth will mean additional financing costs.

**Increase Cosmetic Sales.** This possibility seems to be a logical way to increase income because each dollar of sales will increase the revenue by 50 cents. The first question is how much of an increase in cosmetic sales will be needed? Mrs. Doe calculated that these sales must be increased by about 95 percent rather than by 50 percent as she originally planned. Other questions to answer here are: By what method will sales be increased? By what additional advertising? By offering the receptionist and operators a commission on cosmetic sales? By reducing prices? What effect will these methods have on revenue? How much additional inventory will be needed? How will it be financed? Is storage and display space sufficient to accommodate increased sales?

**Reduce Expectations.** Sometimes the only practical solution is to reduce the expected profit. Mrs. Doe decided that \$10,000 net profit after taxes was not in the picture next year. Based on her knowledge of the beauty shop business, she felt that her shop was not quite ready to add another operator. For one thing, she foresaw the possibility of personnel trouble if a new operator was not kept busy.

She also felt that trying to push cosmetic sales up by more than 50 percent could cause customer dissatisfaction. She reminded herself that customers regarded the shop's beauty service highly and decided that any major growth in sales must come from that end of the business. Another operator and \$10,000 or more net profit after taxes might be feasible the year after next. She would keep the possibility in mind as she moved into next year.

## Periodic Feedback And Control

A budget provides a tool for control. You start building this facility when your budget for 12 months is completed. Break it down into quarters. Such a breakdown allows you to check for any discrepancies that may not show up readily in a 12 month budget. When many items are added together, it is easy for an error to creep into the totals.

During the year, this quarterly division provides a handle for getting a hold on expenses and other activities.



For example, by looking at next quarter's budget you can anticipate peak periods and schedule stock and labor to handle peak sales volume. You can plan vacations, special promotions, and inventory taking for the slow periods.

A monthly or quarterly profit and loss statement allows you to keep the items in your budget in line with operations. Ask your accountant to show the actual and the planned revenues and expenses on the income statement so you can compare them. Thus, you can pinpoint and work on the problems that have occurred during the month or the quarter. Your objective is to guide your activities toward the most profitable type of operations.

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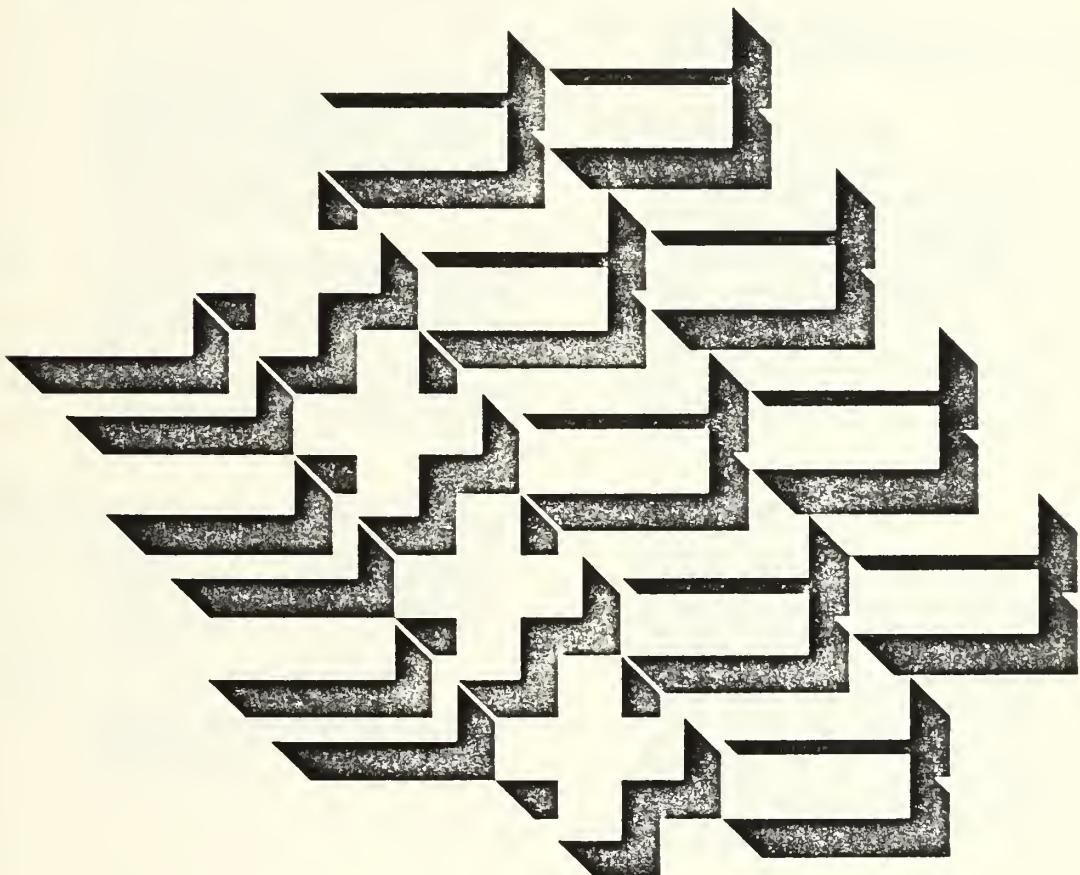
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**SBA**

# Breakeven Analysis: A Decision-Making Tool

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## Summary

Breakeven analysis is not a panacea. It's only one of the many tools available to the business decision maker. But it's a good tool with which to begin to approach decision problems.

Through first a simplified and then a detailed illustration, this Aid illustrates ways in which breakeven analysis can be applied to sales, profit, cost, and selling price problems and how it can be used to help make sound decisions for employing idle plant capacity, planning advertising, granting credit, and expanding production.

## Part One

This illustration, as a conversation between a business counselor (C) and the owner-manager of a small store (O-M), discusses a simplified method of calculating the breakeven point for a small retail operation. While this method is not appropriate for manufacturers or large retailers, it provides a financial planning takeoff point for small stores.

- O-M I'm ready to expand. I've just had a great fourth quarter. I've got a chance to move to a larger store in a good location. I really think I'm on my way. Still, though, I don't want to take any unnecessary chances and lose what I've built up these first three years. What do you think I should do?
- C: Let me answer your question with a question: What's your breakeven point now and what will it be if you assume the added expansion cost?
- O-M: I'm not exactly sure, but after that last quarter I've got money in the bank and I'm paying all my bills on time.

## What Bank Balances May Not Reveal

- C: I'm glad to hear you're in good shape, but you can't make an intelligent expansion decision based on your bank balance at a given moment.
- O-M: You ought to know, but why not?
- C: Take your balance now, for example. It's a lot better than it was at the end of the first quarter, isn't it?

- O-M: Sure, but the first quarter's usually slow. It's a fact of retail life.
- C: And the fourth quarter is usually good, right?
- O-M: Yes, that's a fact, too. But mine was outstanding—it was the best I've ever had.
- C: I'm sure it was, but it can distort the picture. If you're relying on your bank balance for a feel for your breakeven point, you may just be guessing. Many things influence your bank balance that may not necessarily have a direct bearing on the breakeven point for your store. Seasonal fluctuation is just one of them.
- O-M: There are more?
- C: Sure, capital expenditures, extraordinary repairs, unusual outlays . . .
- O-M: Okay, I get the point. My bank balance is meaningless. What about this breakeven thing?

## What Breakeven Means

- C: Breakeven is simply the point where costs equal what you're taking in—no profit, no loss—over a relevant sales range. To calculate this point you must work with only two factors, fixed expenses (like insurance or rent) and variable costs (like cost of goods or sales commissions).
- O-M: I sure wish my costs were fixed. Everything goes up for me. My insurance, for example, looks like it's going up 25 percent over last year.

## Fixed and Variable Costs

- C: Well, actually "fixed costs" is something of a misnomer. Sure, rents, property taxes, insurance, even the salary you pay yourself may fluctuate—but on a yearly basis and not in relation to sales. For the purpose of break-even analysis every cost that doesn't vary in relation to sales is called "fixed." Your rent, for instance, stays the same for the year whether you sell \$250,000 or \$2.50 worth of goods, though we know some rents are tied to volume and vary. The same is usually true of utilities, depreciation, and similar expense items.



**O-M:** I see the point. Variable costs, then, are basically my cost of sales? I have to buy more if I sell more. If I paid commissions, I'd be paying more for more sales, and that sort of thing.

**C:** That's right. There can be other variable costs, but we're simplifying. In addition, you'll probably find costs that seem to be part variable, part fixed.

**O-M:** You mean they're "semi-variable" or "semi-fixed?"

**C:** Yes, they're costs that remain fixed up to a certain sales volume and then jump as that volume is exceeded. For example, office costs, or delivery expenses may fit in this category.

**O-M:** How do I treat them?

**C:** Use your good business judgment and split them between fixed and variable costs in what you consider a reasonable proportion. The important thing to hold in mind for simple break-even analysis is to keep it simple. Overcomplexity is, of course, a drawback of this method. But simple break-even analysis really helps you to see your way into a planning problem and to establish its perimeters.

**O-M:** I like the idea of simplicity, but I don't think break-even sounds simple so far.

**C:** I think you'll see how easy it is if we work through an example. Here, take a look at this hypothetical income or profit and loss statement for the B-E Retail Store.

**B-E Retail Store  
Income Statement  
For the year ending December 31, 19\_\_\_\_**

Item	Amount	Percent
Sales	\$60,000	100
Cost of Sales	42,000	70
Gross Profit	<b>18,000</b>	30

Expenses:		
Rent	\$ 1,800	3
Wages	12,600	21
Utilities	2,400	4
Insurance	1,200	2
Taxes	600	1
All Other	600	1
Total Expenses	<b>19,200</b>	32
Loss for Period	<b>(\$ 1,200)</b>	(2)

**O-M:** B-E doesn't seem to have broken even.

**C:** Correct. Let's find out what kind of sales volume B-E needed to break even in that year. For simplicity (there's that word again) let's consider cost of sales (which is 70 percent of sales) as the total variable costs and the expense items of \$19,200 as the fixed costs. We calculate the break-even point by using an algebraic formula.

**O-M:** A simple one, I hope.

**C:** Of course. It's just  $S = F + V$ , where:  
 $S$  = Sales at the break-even point,  
 $F$  = Fixed expenses, and  
 $V$  = Variable costs and expenses as a percent of sales.

**O-M:** All right, we know B-E's variable and fixed costs. How do we get sales?

**C:** Let's plug in the figures:  
 $S = \$19,200 + .70S$   
 $10S = \$192,000 + 7S$

**O-M:** Excuse me. 10S?

**C:** I multiplied the whole equation by 10 to get rid of the decimal fraction, because I think it's easier to work with whole numbers. Anyway, we get:  
 $10S - 7S = \$192,000$   
 $3S = \$192,000$   
 $S = \$64,000$

**O-M:** B-E needed \$64,000 total sales to break even? Anything less, they'd have a loss; anything more they'd make a profit?



C:	You've got it. Let's check it, though, just to confirm it:
	Sales \$84,000
	Less Cost of Sales -\$44,800 (70% of sales)
	Gross Profit \$19,200
	Less Expenses -\$19,200
	Profit or Loss \$0

O-M: Okay, so B-E has broken even. But what about my problem?

## Breakeven Analysis for Planning

C: Break-even analysis is just what you need. It's primarily a planning tool. I've looked at your Income Statement and divided it into fixed and variable costs. As I see it, your cost of sales, which we'll consider as your total variable costs, comes to about 60 percent of sales. Your fixed expenses ran about \$60,000. So for last year:  
 $S = \$60,000 + .60S$   
 $10S = \$600,000 + 6S$   
 $4S = \$600,000$   
 $S = \$150,000$   
 You had to sell only \$150,000 worth of merchandise to break even.

O-M: As you can see, I sold \$200,000 worth, but I didn't make a \$50,000 profit.

C: Right, you made a \$20,000 profit just as the bottom line indicates. Remember, you still had those variable costs on sales even after all of your fixed expenses were covered at the \$150,000 level.

O-M: Oh, I see, it's like this:  
 $S = F + V + Profit$   
 $S = \$60,000 + .60S + \$20,000$   
 $10S = \$600,000 + 6S + \$200,000$   
 $4S = \$800,000$   
 $S = \$200,000$

C: Now you've got it. Let's consider your expansion question. How much will your rent increase?

## Using Breakeven Analysis to Examine Expansion Feasibility

O-M: It would be about \$5,000 more. I figure the utilities for the larger space will be \$2,000 more than I paid last years. Taxes, the "fixed" ones, I expect to run about \$1,000 more and my insurance will increase about \$500. I also think I may need to hire another sales person.

C: Let's say you do. What do you plan to pay?

O-M: I'd pay an experienced sales clerk about \$9,000. I'm toying with the idea of instituting a 2 percent commission on sales as an incentive, too.

C: All right. We know it's not as simple as we'll lay it out, but I think the analysis will give you an idea of whether or not to explore the expansion idea more carefully and in greater detail.

O-M: Fine.

C: Your fixed expenses will rise by \$17,500, if you include hiring another employee. That brings them to \$77,500, assuming no other increases from last year's \$60,000. For simplicity's sake let's assume your cost of sales (your variable costs) will increase only by the 2 percent commission. That means 62 percent of sales for variable costs. So:  
 $S = \$77,500 + .62S$   
 $100S = \$7,774,000 + 62S$  (multiplied by 100 to eliminate fraction)  
 $38S = \$7,775,000$   
 $S = \$205,000$  (approximately)

O-M: Only \$5,000 more than I did last year? I can do that easily.

C: And be \$20,000 in profits worse off than last year. Let's put last year's \$20,000 profit in—in an expansion you still might want to do at least as well:  
 $S = \$77,500 + .62S + \$20,000$   
 $100S = \$7,750,000 + 62S + \$2,000,000$   
 $38S = \$9,750,000$   
 $S = \$257,000$  (approximately)

O-M: Hm, that's approximately a 25 percent sales increase just to make the same profit as last year.



## Business Judgment Still Necessary

- C: Do you think you can boost sales by that much? Perhaps you see long range benefits from expansion that justify sacrificing some profit for the short run.
- O-M: I'm not sure. I'll have to give it more thought, look at the trends in my business and in this area. My pricing policy may need adjustment. Maybe I can cut some costs. But now at least I've got a starting point, a dollar figure I can work with and from. Most importantly of all, I have a technique to help me attack my problem and help point me toward a rational decision.
- C: That's what breakeven analysis is all about.

## Part Two

Breakeven analysis can be more than a simple tool. It can be an approach for dealing intelligently with uncertainty. There are always difficulties in estimating uncertain variables such as demand, but by specifying the levels of other variables like costs or profit that affect the income of a firm, a required—or minimum—level can be found for the unknown quantity. Any problem requiring income estimation can be set up so that the most difficult variable to estimate is isolated for solution.

Imagine a firm, the Acme Company. Acme has a vacant plant equipped sufficiently to produce a number of new products. Fixed costs for this facility are \$250,000. Acme is looking at a potential new product for production in this plant. The product, an electric fork, will sell for \$10 apiece and has variable cost for materials, labor, overhead, and other items of \$7.50 per unit.

At present management feels certain that the market for this product is 2 million units per year. The physical capacity of the plant is 15,000 units per month or 180,000 per year.

## Simple Breakeven Analysis

Should Acme make electric forks in its vacant plant? To begin to answer we need to find the contribution margin (CM) for the product. Contribution margin is simply what's left of revenue to cover fixed costs and profits after direct out-of-pocket (i.e. variable) costs have been subtracted; that is:

$$CM = Revenue - Variable Costs (VC)$$

When you subtract fixed costs (FC) from the contribution margin, you get earnings (before interest and taxes). You can then calculate the breakeven level by dividing fixed costs by CM. If CM is expressed on a per unit basis, the breakeven volume will be expressed in units. If it's expressed as a percent of revenue, the breakeven volume will be in dollars.

Let's look at Acme's electric fork project to see how this works.

### Contribution on a Per Unit Basis

$$\begin{aligned} CM &= Revenue (Price) - Variable Cost (VC) \\ &= \$10 - \$7.50 \\ &= \$2.50 \end{aligned}$$

$$\begin{aligned} \text{Breakeven volume} &= \frac{\text{Fixed Costs (FC)}}{CM} \\ &= \frac{\$250,000}{\$2.50} \\ &= 100,000 \text{ units} \end{aligned}$$

### Contribution as a Percent of Revenue

$$\begin{aligned} CM \% &= \frac{\text{Price} - VC}{\text{Price}} \\ &= \frac{\$10 - \$7.50}{\$10} \\ &= \frac{\$2.50}{\$10} \\ &= 25 \% \end{aligned}$$

$$\begin{aligned} BE &= \frac{FC}{CM \%} \\ &= \frac{\$250,000}{25 \%} \\ &= \frac{\$250,000}{.25} \\ &= \$1,000,000 \end{aligned}$$

Note that you can get the breakeven dollar total by multiplying the breakeven volume in units by the selling price or the number of units by dividing total revenue dollars at breakeven by price.



What's the answer to Acme's question? Well, the simple answer is that it should go ahead with the project. To breakeven they need to capture only 100,000 units worth or 5% of the estimated market of 2 million units per year. Second, they'll be operating well under the plant's physical capacity of 180,000 units per year at breakeven. Acme ought to be able to make a good profit using the vacant facility, if they can capture more than 5% of the market. With production and sales at capacity it looks like they'd make a profit of \$200,000 before taxes (80,000 units  $\times$  \$2.50 = \$200,000), since all fixed costs will be covered at the 100,000 unit level.

Unfortunately, this is the simple answer. There are some difficulties with this easy as pie approach to Acme's product question.

## Some Shortcomings of Breakeven Analysis

The major problem is that no project really exists in isolation. There are alternative uses for the firm's funds in every case. For example, in Acme's case the vacant plant could be leased to another company for some return. It could also be used for another product. We must, therefore, always consider not only the value of an individual project, but how it compares to other uses of the funds and facilities.

Nor does breakeven analysis permit proper examination of cash flows. It's generally accepted in basic financial theory that the appropriate way to make investment or capital decisions is to consider the value of a proposed project's anticipated cash flows. If the discounted value of the cash flows exceeds the required investment outlay in cash, then the project is acceptable.

There are other objections. Breakeven analysis makes many restrictive assumptions about cost-revenue relationships; in normal use it's basically a negative technique, defining constraints rather than looking at benefits; and it's essentially a static tool for analyzing a single period. What all this theory boils down to is that breakeven analysis is too simplistic a technique to be used to make final investment decisions.

You might well ask then: If that's true, what is breakeven analysis good for?

## Some Basic Uses for Breakeven

1. It's a cheap screening device. Discounted cash flow techniques require large amounts of expensive-to-get

data. Breakeven can tell you whether or not it's worthwhile to do more intensive (and costly) analysis.

2. It provides a handle for designing product specifications. Each design has implications for cost. Costs obviously affect price and marketing feasibility. Breakeven permits comparison of possible designs before the specifications are frozen.

For example, in many small businesses a new product with an uncertain volume is often more feasible if it's made with temporary hand tools and jigs rather than with expensive production tooling. The first method typically has higher variable costs, but lower fixed costs. This often results in a lower breakeven for the project—and lower risks and potential profits. The more automated approach, on the other hand, raises the breakeven, but also raises the risks and profit potential for the company. Breakeven lets you examine these trade-offs.

3. It serves as a substitute for estimating an unknown factor in making project decisions. In deciding whether to go ahead on a project or to skip it, there are always variables to be considered: demand, costs, price, and miscellaneous factors. When most expenses can be determined, only two missing variables remain, profit (or cash flow) and demand. Demand is usually tougher to estimate. By deciding that profit must at least be zero (the breakdown point), you can then fairly simply find the demand you must have to make the project a reasonable undertaking.

You still have to compare the demand figure at breakeven with the market share you think you can capture to judge the worthiness of the project, and you'll have to use your business sense here. But breakeven gives you a way to attack uncertainty, to get onto the target if not into the bull's-eye. Let's look at some examples.

## Breakeven Applied to Uncertainty

**Profit Margin.** The typical breakeven approach develops the volume needed for producing no profit. What if you think you're in business to make a profit?

Using the Acme example, let's say we'd like a 10% profit margin on the project. The original contribution margin for the electric fork was 25%, but that was at zero profit. In effect, our 10% profit acts like a variable cost, so we must adjust CM% accordingly:  $25\% - 10\% = 15\%$ . Now we can calculate breakeven (BE) using the percent of revenue approach:



$$\begin{aligned} BE &= \frac{FC}{CM\%} \\ &= \frac{\$250,000}{15\%} \\ &= \$1,888,887 \text{ (or } 166,667 \text{ units at } \$10 \text{ each)} \end{aligned}$$

This is still below plant capacity. Acme can now look at the market and make a judgment on the probability of selling that many electric forks.

**Dollar Profit.** What if Acme wants a fixed dollar profit of \$150,000? Here we treat the profit as a fixed cost, so we've got to add it to the fixed cost established for the plant:  $\$150,000 + \$250,000 = \$400,000$ . We can now calculate the breakeven volume using the per unit approach:

$$\begin{aligned} BE &= \frac{FC}{CM} \\ &= \frac{\$400,000}{(\$10 - \$7.50)} \\ &= \frac{\$400,000}{\$2.50} \\ &= 160,000 \text{ units (or } \$1,600,000) \end{aligned}$$

Again this is below capacity. And again somebody has to make a judgment on the likelihood of selling this many units.

**Maximum Out-Of-Pocket Cost.** Suppose Acme's management can forecast sales with a degree of assurance. They judge that they can sell 150,000 of the new electric forks each year. What out-of-pocket expenses can they incur and still breakeven? First, We've got to change the breakeven formula around a little:

$$\begin{aligned} BE_{vol} &= \frac{FC}{CM} \\ BE_{vol} \times CM &= FC \\ CM &= \frac{FC}{BE_{vol}} \end{aligned}$$

Now we can find the CM for these circumstances:

$$\begin{aligned} CM &= \frac{\$250,000}{150,000 \text{ units}} \\ &= \$1.67 \end{aligned}$$

Subtracting the CM of \$1.67 from the selling price of \$10, we get \$8.33, the variable cost Acme can incur on each unit and still break even. Similarly, if a \$200,000 profit is desired at the proposed volume, we find that the contribution margin equals \$450,000 divided by

150,000 units or \$3. At this level of desired profit, variable costs must be held to \$7/unit.

This example shows how to use breakeven analysis to help set product specifications. By isolating the allowed cost structure, the right product structure restrictions can be determined and the product engineered to the cost requirements or abandoned.

**Selling Price.** Assume again that variable costs for producing the fork are \$7.50/unit and there are \$250,000 in fixed costs. Add to those data the known sales volume of 150,000 forks and a desire to make a profit of \$100,000 per year. What's the selling price?

$$\begin{aligned} CM &= \frac{FC}{BE_{vol}} \\ &= \frac{\$250,000 + \$100,000}{150,000 \text{ units}} \\ &= \frac{\$350,000}{150,000} \\ &= \$2.33 \end{aligned}$$

The price must equal variable cost plus fixed cost:  $\$7.50 + \$2.33 = \$9.83$ . This \$9.83 selling price can now be compared to the existing market price to determine if the Acme fork has a good chance of selling or if the specifications must be altered to get the price down. This approach works well for bidding.

**Advertising Decisions** Advertising is essentially a fixed cost. Any added fixed costs raise a firm's breakeven point and thus require added revenue (or lowered variable costs) to pay for them. The money for fixed costs comes from the contribution margin.

In the Acme electric fork example CM % is 25 %. Thus, four additional dollars of revenue are required to cover each additional dollar of fixed cost:  $\$1 - 25\% = \$4$ . (If the Acme project's CM % were 40%, it would take \$2.50 to cover each additional fixed cost dollar, \$10 if the CM % were 10%.)

So, if Acme is considering a \$2500 expenditure for an ad, it knows it will need  $4 \times \$2500$  or \$10,000 in extra sales just to cover the cost of the ad. Here management isn't trying to guess how much in sales they'll get from the ad. Instead, they know how much they must get to be only as well off as they would be without any advertising. This approach provides a built-in standard for judging the results of advertising. If after an appropriate period added sales aren't enough to justify the cost of the ad, it can be abandoned as an approach.



**Granting Credit.** Suppose Acme is examining a prospective electric fork distributor as a potential credit customer. The distributor expects to buy 500 units per month from Acme. Terms will be net 30 days and it's conservatively estimated the account will turn over eight times per year. What should Acme do?

First of all, when a new account is taken on, the potential loss for the supplier of credit is the variable cost of the balance carried. In addition, the creditor incurs the costs of carrying and administering the account.

Assume in this case that carrying costs amount to 10% of the average balance and administrative costs are fixed at \$500 per year for the new account. The average expected balance is found by taking total sales and dividing by turnover.

$$\begin{aligned}\text{Average expected balance} &= \frac{500 \text{ units} \times \$10 \text{ per unit} \times 12 \text{ months}}{8 \text{ times}} \\ &= \frac{\$60,000}{8} \\ &= \$7500\end{aligned}$$

Fixed costs for taking on this account are, therefore, 10% of this average balance plus the administrative cost:  $FC = (\$7500 \times 10\%) + \$500 = \$1250$ .

To these fixed costs must be added the variable cost of the average balance, 75% of \$7500 in this instance. (That's the \$7.50/unit variable cost divided by the \$10 price—Acme incurs the \$2.50/unit fixed cost up to breakeven regardless of granting credit or, indeed, selling forks.) So, the potential total cost, including possible loss of the outstanding balance, is:

$$\begin{aligned}\text{Total cost} &= (\$7500 \times 75\%) + \$1250 \\ &= \$5625 + \$1250 \\ &= \$6875\end{aligned}$$

Taking into account that with the fork's CM % of 25%, \$4 of revenue is needed to cover \$1 of additional cost:

$$\begin{aligned}BE_{\text{account}} &= \$6875 \times 4 \\ &= \$27,500\end{aligned}$$

Thus, Acme needs \$27,500 in sales to the distributor to insure that the account at least breaks even. Since expected yearly sales are \$60,000, the account should hit that volume in under six months. Again, we've reached the point that managerial judgment must be brought into play.

This is not the most sophisticated approach to credit granting ever proposed, but it does show the expected exposure to loss the account would add. The smaller the contribution margin and the slower the turnover, the higher the risks will be. Knowing the financial circumstances of the firm seeking credit, management can usually judge easily whether or not that firm can pay its bills for six months or whatever the breakeven period turns out to be. This is the creative treatment of risk analysis.

**Labor Costs.** So far the examples have been simple and straightforward. Business life, alas, isn't. In the traditional version of breakeven analysis variable costs generally include items such as material, labor, and overhead. In reality, however, some of these costs may not be variable over the operating range of the company.

Here are the figures from the original Acme example in more detailed form:

Product Price	\$10.00/unit
Variable Costs	\$ 7.50/unit
From:	
Material	\$4.50/unit
Overhead & Other	\$ .50/unit
Labor	\$2.50/unit
Fixed Costs	\$250,000/year

The labor cost is based on five crews of five people each at \$10,000 per person per year with each crew producing 20,000 forks annually.

For simplicity we assumed originally that at any level of production total variable costs were \$7.50/unit. People, however, cannot in reality be shifted that smoothly. Thus, in a narrow range of production some labor costs become fixed in effect. This fact can change the breakeven point of the firm. It also affects the contribution margin and pricing, promotion, and similar decisions.

Using the traditional approach it looked as though the breakeven point was 100,000 units. It also appeared that, if another 10,000 units were made and sold, Acme would make a profit of \$25,000 (10,000 unit  $\times$  \$2.50 contribution margin per unit). In reality, however, the original breakeven represents the effective capacity of the firm. An extra 10,000 units could be produced only if a new crew is put on at a cost of \$50,000. At the 110,000 unit level we actually find:

Sales 110,000 units @ \$10/unit	\$1,100,000
Less Material @ \$4.50/unit	495,000
Overhead @ \$ .50/unit	55,000
Labor: 6 crews	300,000
Fixed Costs	250,000
Profit	0



The firm is merely breaking even.

Here, labor has essentially become a fixed cost; overhead and material costs are the only true variable expenses. The CM for the product has changed:

$$\begin{aligned} \text{CM} &= \text{Price} - \text{VC} \\ &= \$10 - (\$4.50 + \$0.50) \\ &= \$5.00/\text{unit} \text{ (or } 50\%) \end{aligned}$$

Fixed costs are the facility costs plus the labor costs for six crews:  $\text{FC} = \$250,000 + (6 \times \$50,000) = \$550,000$ . So now,

$$\begin{aligned} \text{BE}_{\text{vol}} &= \frac{\text{FC}}{\text{CM}} \\ &= \frac{\$550,000}{\$5.50} \\ &= 110,000 \text{ units (or } \$1,100,000) \end{aligned}$$

Where does that get us? In general, it tells us that the important thing to keep in mind when using breakeven analysis is the true nature of the firm's cost structure. Some firms have a flexible labor force and standard analysis works well.

In many service businesses, however, such as restaurants where idle labor cannot be manipulated smoothly, management must treat such costs differently. In many small businesses certain skilled workers can't be laid off without being lost to competitors. A small printing company with a good press operator or typesetter, for example, can't afford to lay off these key people when business is slow without the risk of losing them permanently. The key to success is to increase revenue to help cover their costs. Pricing these necessary extra sales and making sound advertising and promotion decisions can be greatly aided by using the variations of breakeven analysis discussed.

Breakeven analysis requires above all realistic definition of costs, both in amount and type. For many small businesses nearly all costs are fixed. Key people can become fixed costs. To deal with slow periods owner-managers must try to get new business by pricing favorably—marginally. Their products can be sold at a small margin over variable costs, offsetting some fixed costs.

If Acme in the example above were to produce the 10,000 additional forks for which it has available labor capacity and sell them at something above the \$5/unit variable costs, it would make a profit. As long as new business is added to an existing vacancy in capacity, any contribution to covering fixed costs will increase profits or at least reduce losses.



APPENDIX H

Section E

COUNSELLING NOTES



**Small Business Administration  
COUNSELING NOTES**

**No.  
108**

**Small Volume Home Building**

(By David J. Rollison, Director of Business Management,  
National Association of Home Builders)

The home building business in the past has offered an attractive opportunity for small businesspeople. Over half of the new single-family homes provided in the United States have been constructed by small volume builders. The small volume builders constructs an average of 20 homes a year, many are built on site for specific buyers. Others are constructed, or "spec" built in anticipation of a buyer.

Traditionally, small builders learn the business from experience in the building and construction trades. However, in today's housing industry abilities beyond trade skills are needed. Marketing, finance, land acquisition, negotiation, work coordination (including planning, forecasting, and subcontracting), accounting, and other skills are required. It is also important that builders keep up with the latest industry developments in cost saving devices, federal housing programs, and local construction regulations. Builders must be familiar with interest rate trends; and mortgage market developments. The small builder must be aware of all national forces that eventually will effect local housing markets.

There are basically two types of single-family builders, the custom builder and the speculative or tract builder. Basically both operate out of homes or small offices. The custom builder obtains a contract to build a house for a fixed fee or percentage over cost. The builder may use subcontractors on every phase of construction.

The "spec" builder who builds in hope of finding a buyer should plan to have enough working capital to live on for two years. The "spec" builder will need down payment for land, which usually cost 20 percent of the house sales price. Builder will need to arrange for a construction loan in order to build the "spec" house. A good credit rating is essential because builders are personally liable on all loans and notes. Ideally, the home builder should make a net profit before taxes of 10 percent.

Equipment needs vary with the scale of a builder's operation. Most builders need a pick-up truck, electric generator, storage space, possibly a heating device, and eventually an office and associated equipment.

Small businesspeople have been the backbone of the single-family home building industry. In recent years, however, changes such as rising materials costs, higher interest rates, rising land prices, and inadequate cash flow have reshaped those elements that in the past brought builders success.



As a result of these changes, the successful builder must conduct some form of market research before beginning a new project. Basically, market research is defining the housing needs of the region the builder services (or market) in terms of price and specified types of housing people desire. Typical marketing research endeavors would include analyzing the reasons for the success or failure of a competitor's recent project, researching the age and income distributions of the population in an area and from it predicting future trends. For example: If an increasing number of young married couples are moving into a community, the housing needs of the community will rise. A builder might then try to learn the income distribution of this group. This data will then give a contractor a clue to the specific type of housing and price range that will respond to the needs of these young couples. When the builder feels a survey has correctly been completed, plans can then be developed for both the types of housing to be constructed and also the sales promotion activities to follow.

Builders may be required to be licensed and to follow local building codes. Specific information in these areas generally can be obtained from local authorities. The latest mortgage and Federal agency information is available from the National Association of Home Builders, Mortgage Bankers Association, Federal Home Loan Bank Board, and local savings and loan associations.

The sources of information shown below may be helpful to anyone planning to enter the small volume home building industry.

Federal Home Loan Bank Board  
101 Indiana Avenue, N.W.  
Washington, D.C. 20552

Mortgage Bankers Association of America  
1125 15th Street, N.W.  
Washington, D.C. 20005

National Association of Home Builders  
15th and M Streets, N.W.  
Washington, D.C. 20005

How to Start Your Own Small Business, Drake Publishers, Inc., New York, 1973.

Construction Company Organization and Management, George E. Deatherage,  
McGraw Hill, 1964.

"Business Plan for Small Construction Firms," Management Aid No. 221.  
Small Business Administration, U.S. Government Publications (Free)

"Starting and Managing a Small Business of Your Own," Starting and Managing  
Series No. 1:15:1, Small Business Administration, Superintendent of Documents,  
Washington, D.C. 20402.





**U.S. Small Business Administration**  
Management Assistance

# Starting Out Series

Number 134

September 1980

## Roofing Contractors

**By Fred C. Good**  
National Roofing Contractors Association  
Oak Park, Illinois

Roofing contracting is a part of the construction industry. The roofing contractor often acts as both a sub-contractor and as a direct or general contractor. In performing sub-contract work, the roofing contractor may be employed by a general contractor or a home remodeler and bid work to the general contractor. Essentially, work is performed for the general contractor. In the field of direct contracting, the roofing contractor may work directly for the building or home owner. In either case the owner of the business is involved in the construction process. The contractor must be prepared to estimate and bid for work; have labor available to perform the work; to be able to effectively purchase materials to be installed; and to see that the work is completed efficiently, according to specification, and within a prescribed period of time.

Long hours—often 12 to 14 a day—are common. A contractor takes great pride in work that is acceptable and feels a definite part of the community as he/she is a part of the construction process.

To be a successful small business person, it is important that the individual has some experience with the process of roof construction, including knowledge of the materials used, types of construction involved, management of labor, and coordination with other building trade contractors that may be involved in the process.

In the roofing/contracting business, there are firms that pursue only the large industrial/commercial type of construction. There are many smaller firms that pursue residential shingling and remodeling roofing types of work. The capital requirements of the person beginning in the roofing business will, of course, vary, depending on the type of work pursued. A person starting a small business will do some residential contracting and perhaps some maintenance and repair work on homes and smaller two, four and six-flat apartment buildings. Estimated capital requirements would be \$10,000 to \$20,000. Purchases would require at least one truck and some equipment for the handling of materials, including a hoist and trailer, a kettle and some brooms, shovels, and buckets. These can often be purchased second-hand

or, if purchased new, can be financed over a three-year period.

A suitable location from which to operate the business and some storage space for working materials and equipment will be required. For dealings with the supply houses, the small roofing contractor should have established a good credit rating, or have adequate cash on hand for materials until a good relationship with supplier is formed.

The small business owner will need to investigate the various legal and regulatory requirements necessary for business. Insurance is mandatory and bonding should be available for some work projects. Workers compensation insurance for the work force will be required and business licenses and permits, depending on the particular locality in which the work is being performed. There must be compliance with the Occupational Safety and Health Act (OSHA), and should the contractor perform any work involving the use of Federal funds, there has to be compliance with the equal employment and affirmative action programs. This of course will apply to contracting work done for all levels of Government, for instance a small repair on a local school or on a municipal building.

On the limited capital investment that has been proposed, the contractor should anticipate doing a volume of \$50,000 to \$60,000 annually in sales. This sales volume should guarantee a salary to the owner/manager of about 20 percent of annual sales and should allow a small return on capital investment. As business continues, contractor should plan to increase sales to a volume of \$100,000 to \$150,000 annually, which should increase the return on investment and allow purchase of additional equipment and additional sources of business.

One of the advantages of a profession in the roofing industry is the relative stability of the industry. There is always need for basic shelter and for roofing on all types of new construction. Additionally, there is always a need to repair and maintain existing structures. The roofing contracting business is an industry that can



survive periods of recession. The business is often thought to be seasonal. While it is true that outside work can only be done in suitable weather, inside repairs and estimating work can be carried on continuously.

**For Further Information:**

National Roofing Contractors Association  
1515 North Harlem Avenue  
Oak Park, Illinois 60302  
Publications: *The Roofing Spec;*  
*Action Information* (bulletin)

United Union of Roofing  
Waterproofing and Allied Workers (RWA)  
1125 17th Street, N.W.  
Washington, D.C. 20036



**Small Business Administration**  
**COUNSELING NOTES**

**No.**  
**128**

## **Paint and Decorating Centers**

(By Professor John E. Trotter, Concord College, Athens, W. Va., in consultation with the National Decorating Products Association, St. Louis, Mo.)

Paint and wallcovering stores have evolved into more than 14,000 Decorating Centers in the United States, many of which are a part of large corporation-owned chains. Despite the competition from large corporations, the independent decorating center has flourished over the past decade. The greatest strength of the independent decorating center is in small town and rural America, yet many have been highly successful in big cities. The key to this success is long hours and product knowledge.

Much of the independent decorating center's business results from the ability of the store personnel to counsel with their customers. It is important to know what type of paint should be used on what type surface, how the surface should be prepared before painting or hanging wallcoverings, what type adhesive is used with what type wallcovering, what type paint applicator should be used on various jobs, and so forth. Many store owners either attend or send employees to decorating and interior designer schools so that they can advise customers on the total decorating job. Unlike most retail stores, decorating centers have not gone to check-out counters because this destroys the personal relationship with customers.

### Equipment Selection

Decorating Centers have broadened their product line by moving into such fields as art materials, wall decorations, floorcoverings, window treatments, picture frames, and spray equipment. Today, the average Decorating Center does approximately 75 percent of total sales in the paint and wallcoverings departments and 25 percent in other product lines. The growth trend in the "other product category" is still continuing, especially the window treatments department.

### Capital Requirements and Operating Ratios

The investment required to open a Decorating Center will vary from one area of the country to another and from one part of town to another, depending upon the occupancy costs and salary rates. In addition to these expenses, store fixturing, signs and inventory stock represent an investment of \$50,000 to \$70,000. Many paint manufacturers, since theirs is the largest volume line in most stores, are willing to help with initial financing or to offer 60-90 day billing on the paint inventory. This is particularly true in the case of a decorating store manager with proven sales ability and knowledge.



Often a Decorating Center requires 9 to 15 months to reach the break-even point. Sales should reach \$150,000 by the end of the second year, and \$200,000 by the end of the third, with a net profit of about 15 percent before taxes. The general gross profit margin on decorating products is 40 percent before expenses. As a rule, one employee is required for each \$50,000 to \$60,000 in sales.

Store Operations and Marketing

The paint manufacturer can be of great help within the scope of operations and marketing. Many paint companies have a special department devoted entirely to site selection, store layout and design, and inventory selection. Other companies have salespeople or regional managers in these areas. Also, most paint manufacturers offer a co-op advertising program. This program will include payment of part of the advertising expenses, layout for newspaper advertising, radio commercials, and store display material.

All State and Federal regulations regarding the operation of a retail business apply.

Sales growth for Decorating Centers has been at the rate of 15 percent per year in recent years and this is expected to continue.

Information Sources

National Paint, Coatings Association  
1500 Rhode Island Avenue, N.W.  
Washington, DC 20005

National Decorating Products Association  
9334 Dielman Industrial Drive  
Saint Louis, Mo 63132

Wallcoverings Manufacturing Association  
Wallcoverings Information Bureau  
P.O. Box 359  
Springfield, NJ 07081



APPENDIX H

Section F

PROCUREMENT AUTOMATED SOURCE SYSTEM

(PASS)



U.S. Small Business Administration  
Office of Procurement Assistance



*For Buyers and Suppliers--*

*Get the **PASS** to sales and  
purchasing opportunities.*



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## **What Is PASS?**

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Every work day, businesses and governments award contracts and subcontracts for supplies and services valued at millions of dollars. In 1977, U. S. Small Business Administration (SBA) established the Procurement Automated Source System (PASS) to assist small businesses in competing for these opportunities.

PASS is a national automated directory of small suppliers of goods and services. Presently, it lists profiles of almost 150,000 companies, including over 26,000 minority-owned and 27,000 women-owned firms.

PASS provides benefits to both buyers and suppliers. It enables procurement offices to quickly identify small companies meeting their procurement needs. At the same time, it provides small businesses with a valuable marketing avenue for entering the Federal marketplace or expanding their existing Federal contracts.



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## **SUPPLIERS - Why List Your Company In PASS ?**

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By listing your firm in PASS, you can increase your marketing opportunities. PASS is actively used by purchasing officials from private industry and the public sector to find potential suppliers of goods and services. Although no one can guarantee new business, listing your firm in PASS is an effective addition to your regular marketing and sales efforts.

### **WHAT DOES IT COST?**

Listing your company in PASS is free. Increasing the number of companies in the directory makes PASS more valuable to its users--and, ultimately, to you.

### **WHO CAN APPLY?**

To qualify for PASS, your firm must be an established, independently-owned small business that is operated for profit in the United States.

### **HOW TO LIST YOUR COMPANY**

To list your company's profile in PASS, obtain a PASS COMPANY PROFILE form from your nearest local SBA office or by writing to the address shown below. Fill out the form as completely as possible. Your company will be listed under the goods, services, special capabilities, and general categories that you write on the form. Then return the postage-paid form to:

U.S. Small Business Administration  
PASS Program-Room 600  
1441 L Street, N. W.  
Washington, D. C. 20416



## **BUYERS - Why Use PASS?**

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PASS saves you time and money. Below are just a few of the system's features:

### **PASS is FAST**

Why waste frustrating hours leafing through phone books, old catalogues, files, and scraps of paper? Simply enter your purchasing criteria to the computer, and get a list of profiles for small businesses that provide the needed goods or services.

### **PASS is FLEXIBLE**

If the listing is too long or too short, simply alter the criteria for a new list of business profiles. PASS offers a wide variety of search criteria, such as the company's product or service, geographic location, labor surplus area, and type of business (e.g., minority-owned). The system will also allow searches by SIC Codes and Federal Supply Codes. Information about a firm's Quality Assurance program and DUNS number will also be available.

### **PASS is COMPREHENSIVE**

PASS is the most comprehensive data base of small business suppliers now available. Presently, PASS lists profiles for almost 150,000 companies and more businesses are continually being added. Up to 200 profiles can be printed at once.

### **PASS is ACCURATE**

Maintaining an accurate data base is a top priority for the PASS system. Annually, each business listed in PASS is sent an update form. If no response is received, the business is dropped from the system.

### **PASS is EASY to LEARN and USE**

Learning and using PASS is simple and straightforward. Periodically, SBA schedules special training support around the country. However, for people who have a basic familiarity with personal computers, SBA provides a self-instructional training package, including a training diskette and a users manual. In most cases, this is all that is necessary to learn PASS quickly.

### **PASS includes technical SUPPORT**

SBA's PASS contractor provides a free HOTLINE to assist you in learning and using PASS. This service is available during business hours throughout the country and provides quick support for PASS users.

### **PASS is EASY to INSTALL**

PASS can be easily installed on almost any computer capable of connection to a 300-1200 baud modem. This computer, or terminal, with a modem and a good quality telephone line is required for direct access. Chances are the equipment you already have will work. If you have questions, the PASS contractor will provide the necessary technical assistance.

### **PASS is REASONABLY PRICED**

The cost of installation varies with the type of terminal/computer you use, the features you require, etc. The PASS contractor will advise you. The charge for using PASS, which is determined by the amount of "on-line" use, is reasonable. There are no registration fees or minimum use requirements. Bills are issued quarterly.











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